Tab 6 Declaration of Waibel -
teaches Enola + Yellow River cultivars
are same
see chart - 31

part of #33

Declaration of Gil Waibel

Background of Gil Waibel:
B.S. degree in Agronomy from the University of Minnesota – 1975
Seed Analyst – USDA Seed Branch (Beltsville, MD and Minneapolis, MN) – 1975-78
Registered Seed Technologist (RST) – currently inactive
Owner / Seed Analyst – Teal Seed Lab – 1978-89
Co-Owner /Manager – Teal Farms (Dairy and Crop farm) – 1978-89
Seed Analyst and field inspector – Minn. Crop Improvement Association – 1989-91
Manager / Seed Analyst – Ferry Morse Seed Company – 1991-93
Seed Analyst – Asgrow Seed Company – 1993-96
President of the Idaho Seed Analyst Association 1996
Manager / Seed Analyst – Colorado Seed Lab – 1996-98
Member of AOSA Executive Board and Chair of the Publication committee – 1997-98
Manager – Colorado Seed Growers Association – 1998-02
Member of CSU Cultivar Release Committee – 1998-02
Taught at CSU:
- SC380 "Plant and Seed Identification" 1997-01
- Coached CSU Collegiate Crops Judging Team 1996-01
- Member of CSU Seed Correspondence Group

Served as Chairman of the National Coaches Collegiate Crops Judging Committee
Owner / Manager Teal Dairy – 2002-present

While a field inspector for the Minnesota Crop Improvement Association, and Field inspecting for the Colorado Seed Growers Association, Waibel inspected many species including beans to check for trueness to variety. Each field inspected for seed certification, involved checking to see if the plants in the field were the variety stated to be planted in the field. As the field is walked, the field is also inspected for off-types.

While teaching the Plant and Seed Identification class, varietal differences were part of the material taught. Various varieties, or different plant types related to varietal differences were also covered in the class. The species where varietal differences were discussed were wheat, oats, rice and barley.

Preamble:
This project has been set up to determine if any or all of the plant and seed characteristics of yellow bean seed lots planted for Yellow River are clearly distinguishable from Enola. Have the PVP rights to the variety 'Enola" by Pod-Ners been infringed upon. The PVP application for Enola lists many plant and seed characteristics, which will be the bench-mark of this report. During the growing season of 2002, the plant and seed characteristics of Enola, and seed from Yellow River's 2001 Crop, and 2002 crop was observed and analyzed. In a perfect world, with every growing season being the same, seed quality being equal, and no micro-environments in the field, I would expect all characteristics of Enola to be the same as identified in the PVP application from 1996. Unfortunately, we do not have the luxury of equal growing seasons each year. Plants show slight differences in how they develop each year depending on the environment

they grow in. The Enola breeder seed lots tested (1996 and 2001 crop years) and Enola 2001 Certified seed lot were of seed certification genetic quality, yet the 1996 Enola (used as a bench-mark in this study) is getting old, and loosing vigor. The Yellow River seed used for crop year 2001 and 2002 was not certified seed, but commercial beans being used as seed. The Yellow River seed may be genetically inferior to the Breeder and Certified seed lots of Enola. It would be expected that some variability can exist between the Enola, and Yellow River's 2001 crop and 2002 crop lots in our studies due to the genetic differences that we are starting with.

Approach:
Originally we planned to have only one study (study 1) with various lots of seed from Pod-Ners, Yellow River, and Northern Feed and Bean. This study was going to be conducted at Hinesite Research in Delta, Colorado. It was set up as shown in attachment 1.

It was also decided to grow an identical plot in Greeley, Colorado so we could observe any differences that might occur due to the differing climate in Greeley from that of Delta, CO. Our plan was to have Kenneth Hines take notes on the growth and development of the plot in Delta, and have Gary Knight observe the same at the Greeley plots. Each man is an Agronomist with much experience in bean production. Neither man was told what the plots represented, except that all of the plots were yellow beans of one origin or another. We wanted to know if they saw any differences between the plots, but did not want them to have any bias in their observations. In some cases, very little seed was available, so to keep things equal, about 30 seeds were planted for each of three replicates at each site. The Greeley plot was planted May 31, and the Delta plot was planted June 9, 2002.

Over a week after we finished planting the Delta plot, we began to wonder if we had enough plants to make proper determinations about any/ or lack of distinguishing characteristics of the lots in question in this study. The plots were nice for observations, but we began to feel that the plant numbers were far less than we would need. We set up Study 3, which was comprised of samples of a 2001 Certified Seed lot of Enola, Yellow River 2001 commercial production "seed" lot sample, and Yellow River 2002 crop seed lot sample. Two replicates of 500 seeds each were planted at Hinesite Research in Delta. We wanted to plant three replicates, but space in the field did not allow for this. We did not replicate this study in Greeley. Study three was set up as shown in Attachment 2.

Gil Waibel traveled to Colorado to observe the plots in Greeley and Delta on July 14 to 16, 2002. He met with Kenneth Hines and Gary Knight and discussed with them what they should try to look for. Since they were to do their observation without knowledge of what each plot represented, they were instructed to make notes of any differences they might see. They were to watch for size differences, shape differences, color differences, plant architecture differences, rate of growth differences, and diseases symptoms that might occur, flowering dates, when pods form, maturity dates, and any other plant characteristic that might show itself.

It was decided that we needed to use the Munsell color charts on blooms, pods, leaflets (terminal), and mature pods. Our plan was to photograph (with the Munsell chart) as many color characteristics as we could. We decided after much practice photographing plots at the Greeley site, that we were not getting the detail we needed. We decided to photograph the plants flower by flower, leaflet by leaflet, and pod by pod. We began in photographing in Delta August 18-22, because it was a little farther along than the Greeley plots at that time. Due to the incredible amount of work to generate the date at Delta, it was decided the Waibel would go to Greeley to determine if data also needed to be drawn there as well. Waibel took a trifoliate of the two Enola lots, and placed the trifoliate into each plot at Delta. He saw no distinguishable difference between the Enola trifoliate and the trifoliates of the 2001 and 2002 crops from Yellow River in the Delta plot. The trifoliates used were placed into water, and placed into a zip-lock baggie for over night travel. Waibel drove to Greeley and, as was hoped, the trifoliates were in perfect condition. He place the Enola trifoliates into the 2001 and 2002 crop plots from Yellow River, and again saw no difference in color. It was Waibel's observation that on that day the plots in Greeley were very similar to the plots in Delta, and that all efforts should be concentrated in Delta to get as much data as possible.

We used a slide camera and a high-end (we thought) digital camera at Greeley July 30th. We hired a professional photographer, and he shot pictures for slides, and we shot the pictures with the digital camera. We wanted better results and hired another photographer (and color expert), who used a high quality digital camera. He shot the photos in Delta, and took the result back to his shop in Denver, and analyzed the color of the blooms, leaflets, and green pods. We did not dissect the blooms down to the standard, keel, and wings, because their color is the same. More photos and observations were made throughout September on the green phase in Delta. Mature observations and measurements were made in the last two weeks.

Results:

Plant Requirements - General

1. Market Classes

The PVP market class of Enola is number 12, Other (specify). The class specified is Yellow, of which Enola and Yellow River's 2001 crop and the 2002 crop lot are part of.

2. Maturity:

The PVP maturity of Enola is defined as late. Enola, and Yellow River's 2001 crop and 2002 crop lots matured in the "late" category as defined in the PVP application for Enola.

3. Days to maturity:

The PVP days to maturity of Enola is defined as 101 days.

With the exception of a couple of replicates, most replicates were at least 80% mature for study 1 by October 7, 2002 (120 days), and some replicates are still maturing. None of the replicates of study three were up to 80% mature by October 7. The maturity dates did vary from replicate to replicate, and until all of the maturity data is available, we cannot average the days to maturity for either study. The cool fall weather is slowing down the maturation process this year.

4. Plant habit:
Enola is identified in the PVP application as 1a, Bush-determinate, strong and erect stem and branches. The Yellow River 2001 crop and 2002 crop are also of the same plant habit type as Enola.

5. Average height at maturity:
The PVP average plant height of Enola is defined as 34.9 cm. The plant height data from studies 1 and 3 is as follows:

	Study 1	Study 3
2001 crop	35.23 cm	41.66 cm
2002 crop	34.39 cm	39.45 cm
Enola	29.34 cm	38.79 cm

6. Pod Position:
Enola is identified in the PVP application as 3, scattered pod position. Yellow River's 2001 crop and 2002 crop lots also have scattered pod position.

7. Adaptability to machine harvest:
Enola is identified in the PVP application as 2, not adaptable. The Yellow river 2001 crop and 2002 crop also are not adaptable to machine harvest.

8. Lodging resistance:
Enola is listed in the PVP application as 1 (good) for lodging resistance. In the field none of the plots lodged. Since there was not lodging pressure on the various plots in our studies, I cannot conclude that there is a difference in lodging resistance between Enola and Yellow River's 2001 crop and 2002 crop lots.

9. Anthrocyanin pigmentation:
The PVP application showed that anthrocyanin pigmentation (a red pigment) is absent in the flowers, stems, pods, seeds, leaves, petiols, peduncles, and nodes. The Yellow River 2001 crop and 2002 crop also do not show any signs of anthrocyanin pigmentation, based on visual observation.

10. Known physical stress reaction:
Enola is identified as being tolerant to heat in the PVP application. The Enola and Yellow River 2001 crop and 2002 crop did not show any recordable differences to physical stress reactions in our test studies. We did experience heat stress, and drought stress during this year's growing season.

Leaflet Morphology:

11. Surface
The leaflet surface of Enola is described as wrinkled in the PVP application. The leaflet surface of Yellow River 2001 crop and 2002 crop are also wrinkled.

12. Finish
The leaflet surface of Enola is described as dull in the PVP application. The leaflet surface of Yellow River 2001 crop and 2002 crop are also dull.

13. Shape
Leaflet shape in the original PVP application of Enola is described as primarily ovate. The leaflet shape in studies 1 and 3 of Enola and Yellow River's 2001 crop and 2002 crop lots was primarily ovate. (refer to charts 5, and 21).

14. Apex shape
Leaflet apex shape in the PVP application of Enola is described as primarily acuminate. The leaflet apex shape of Yellow River 2001 crop and 2002 crop is also primarily acumin ate. (refer to charts 2 and 18).

15. Base shape
Leaflet apex shape in the original PVP application of Enola is described as primarily obtuse. It must be noted that the leaf base shape for Enola had more obtuse leaflets in study 3, but more attenuate leaflets in study 1. When the original PVP application was being compiled, the terminal leaflet of the 4th thru 6th trifoliates on the plant were observed. In Study 1 (chart 19) and study 3 (chart 3) all of the terminal leaflets were analyzed. With minor variances, the distribution of leaflet base shapes in studies 1 and 3 is very close between Enola and Yellow River's 2001 crop and 2002 crop lots. Attenuate, obtuse, and cuneate base shapes are fairly similar. The key to the readings in these studies is the consistency of the evaluator in reading the leaflet base shapes.

16. Color
Leaflet color for Enola is defined in the PVP application as Munsell 5GY 5/6. Study one (chart 20) and study 3 (chart 4) both show Enola, as well as Yellow River's 2001 crop and 2002 crop to have primarily the same Munsell 5GY 5/6 color. In fact, chart 4 shows the leaflet colors to be very close. There may be a very slight difference in color between the Enola and Yellow River's 2001 and 2002 crop, but they are within the Munsell 5GY 5/6 category. I noticed a very subtle difference in the plots, especially in Greeley. However, when I put the trifoliate leaf of Enola from Delta into the Enola and Yellow River replicates at Greeley, the color of the trifoliate leaves was not distinguishable. The color difference that appears to exist is a very subtle one, and the leaflet colors of Enola, and Yellow River's 2001 crop and 2002 crop are not clearly distinguishable from the Munsell 5GY 5/6 color.

Flower Requirements
17. Days to 50% bloom
The PVP application defines days to 50% bloom for Enola as 40 days. In the studies 1 and 3 days to 50% bloom was as follows:

	Study 1	Study 3
2001 crop	42 days	41 days
2002 crop	43 days	41 days
Enola	43 days	41 days

18. Standard color
The standard of Enola's flower's color is defined in the PVP application as white. The blossom (standard, wings and keel) was found to be a very slight pink (see charts 1 and 17). Blossom colors changed throughout the day. In the morning they were closer to white, with a very faint pinkish color. If asked what color the blossom was, and I just glanced at it, I would say white. I really had to look close to see any pinkish color to the blossom. In the evening the pinkish color was a little more distinguishable. The blossom color of Enola, and Yellow River's 2001 crop and 2002 crop lots were similar.

19. Wings color
The wings of the flower are defined in the PVP application as white for Enola. We measured the whole blossom, and found a very slight pink color to the whole blossom (see chart 1 and 17). The wing colors of Enola, and Yellow River's 2001 crop and 2002 crop are similar.

20. Keel color
The keel of the flower is defined in the PVP application as white for Enola. We measured the whole blossom, and found a very slight pink color to the whole blossom (see charts 1 and 17). The keel colors of Enola, and Yellow River's 2001 crop and 2002 crop are similar.

Pod (green) Morphology
21. Color pattern
The color pattern for the green pods of Enola is defined as solid in the PVP application. Yellow River's 2001 crop and 2002 crop are also a solid pattern for the green pods. Enola, and Yellow River's 2001 crop and 2002 crop lots are the same for pod color pattern.

22. Primary color general
The primary color in general for the green pods is green in the PVP application for Enola. The color of Yellow River's green pods is also green.

23. Primary color specific
The "primary color specific" for the green pods in the PVP application for Enola is Munsell 5GY 6/6. When the color was read for the PVP application, full sized pods were read. All of the pods in this study were evaluated, and this could be the explanation why there is a wider range of color for the pods of Enola, and Yellow River's 2001 crop and 2002 crop lots. There did seem to be a similar pattern to the distribution of the green pod colors between Enola, and the Yellow River's 2001 crop and 2002 crop lots. Refer to charts 7 and 23.

24. Cross section shape
Enola was defined as having a pear shaped green pod in the PVP application. Yellow River's 2001 crop and 2002 crop lots also had mostly pear shaped pods.

25. Curvature
Green pod curvature for Enola was defined in the PVP application as slightly curved. Most of the pods for Enola and Yellow River's 2001 crop and 2002 crop lots were slightly curved or straight. Study 3 (chart 9, also for study 1 see chart 25) showed a fairly equal distribution of pod curvature between the three lots.

26. Beak orientation
This is a case where there are no definitions to go by. The PVP application called the pod beak orientation straight. Study 1 and study 3 showed a break down for the Enola and Yellow River 2001 crop and 2002 crop lots to be variable in my opinion. With some minor differences, the pod beak orientation is not clearly distinguishable (refer to chart 10 and chart 26).

27. Beak length
The pod beak length for the green stage of Enola is not defined in the PVP application. We did record the pod beak lengths of the green stage as follows:

	Study 1	Study 3
2001 crop	0.71 cm	0.55 cm
2002 crop	0.56 cm	0.62 cm
Enola	0.70 cm	0.55 cm

28. Constrictions
The PVP application defines the constrictions of Enola to be slight. Considering the different stage of growth at the time of the readings for study 1 (chart 24) and study 3 (chart 8), the distribution of the characteristics was similar in each study. Study 3 shows Enola and Yellow River's 2001 crop and 2002 crop lots to be mostly slight. Study 1 shows the three lots to have constrictions defined as slight, deep and none. This category is related to the current maturity of each pod. The measure of mature pods for constrictions is a more reliable measure of pod constrictions.

Pod (mature) Morphology
29. Color pattern
The PVP application defines the mature color pattern of Enola to be solid. The Yellow River 2001 crop and 2002 crop lots also have a solid color pattern.

30. Primary color general
Enola's PVP application defines its primary color in general to be tan. A more detailed study follows next at 31.

31. Primary color specific
The PVP application defines Enola's primary pod color to be Munsell 5Y 8.5/6. The color of the mature pods has a wider spectrum than that defined in the PVP. However, Enola, and Yellow River's 2001 crop and 2002 crop lots followed similar distributions for color of the mature pods in studies 1 and 3 (charts 27 and 11).

32. Suture color specific
The distribution of mature pod suture color for Enola, and Yellow River's 2001 crop and 2002 crop is similar. (refer to charts 14 and 30).

33. Cross section shape
The PVP application defines Enola as having a pear shaped cross section. In studies 1 and 3 the Enola and Yellow River's 2001 crop and 2002 crop lots were mostly pear shaped.

34. Curvature
The PVP application for mature pod curvature called Enola slightly curved. This years data showed a similar distribution toward curved for Enola and Yellow River's 2001 crop and 2002 crop with the exception of Yellow River's 2001 crop being equally split between slightly curved and curved. The pod curvature of results for Enola, and Yellow River's 2001 crop and 2002 crop are similar. (refer to charts 13 and 29).

35. Beak orientation
The PVP application for the mature pod beak orientation of Enola was defined as variable. Charts 10 and 26 show a very similar pattern between Enola and Yellow River's 2001 crop and 2002 crop lots.

36. Beak length
The PVP application defines the beak length of Enola as 1.2 cm. The pod beak length in study 1 and 3 is as follows:

	Study 1	Study 3	Average of studies 1 + 3
2001 crop	1.38 cm	1.18 cm	1.28 cm
2002 crop	1.19 cm	1.27 cm	1.23 cm
Enola	1.31 cm	1.21 cm	1.26 cm

37. Constrictions
The PVP application defines Enola as having slight mature pod constrictions. Charts 12 and 28 show a very similar pattern between Enola, and Yellow River's 2001 crop and 2002 crop lots – all showing slight constrictions.

38. Seeds per pod
The PVP application defines Enola as having 3.1 seeds per pod. Studies 1 and 3 showed the following seed per pod:

	Study 1	Study 3	Average of studies 1 + 3
2001 crop	2.46	4.2	3.34
2002 crop	3.74	3.8	3.78
Enola	2.74	3.2	2.98

Seed Morphology

39. Finish
The PVP application defines the seed finish of Enola as being semishiny. Enola, and Yellow River's 2001 crop and 2002 crop lots were all semishiny in seed finish.

40. Monochrome
The PVP application defines the seed of Enola as being monochrome in color. In studies 1 and 3, the seeds of Enola, and Yellow River's 2001 crop and 2002 crop lots were all monochrome in color.

41. Primary color general
The PVP application defines the primary color of Enola in general to be yellow. In studies 1 and 3, the seeds of Enola, and Yellow River's 2001 crop and 2002 crop lots were all yellow.

42. Primary color specific
The PVP application defines the seed coat color for Enola to be Munsell 5Y 8.5/4 to 7.5Y 8/8. In studies 1 and 3 (charts 31 and 15), most of the seed coat color for Enola, and Yellow River's 2001 crop and 2002 crop lots showed the PVP defined seed coat colors.

43. Color pattern
The PVP application defines the seed coat color pattern for Enola to be solid. In Studies 1 and 3, the seed coat pattern for Enola, and Yellow River's 2001 crop and 2002 crop lots were of a solid color pattern.

44. Hilar ring
The PVP application defines the seeds of Enola to have a hilar ring present. In studies 1 and 3, the seeds of Enola, and Yellow River's 2001 crop and 2002 crop lots all had hilar rings present.

45. Hilar ring color general
The hilar ring of Enola is specified as yellow in the PVP application. Our readings of hilar ring color are in number 46 because this report using the Munsell color scales.

46. Hilar ring color specific
The PVP application defined Enola's hilar ring color to be Munsell 2.5Y 9/4 to 2.5Y 9/6. Studies 1 and 3 (charts 32 and 16) showed very similar distributions of hilar color for Enola, and Yellow River's 2001 crop and 2002 crop lots in the color spectrum defined in the PVP application.

47. Shape
The PVP application defines the seed shape of Enola as cuboid. In studies 1 and 3, Enola, and Yellow River's 2001 crop and 2002 crop all have a seed shape of cuboid.

48. Weight 100 seeds
The PVP application defines the seed weight of Enola as 43 grams per 100 seeds. The data from studies 1 and 3 resulted in 100 seed weights as follows:

	Study 1	Study 2	Average of Studies 1 + 3
2001 crop	49 gm	54 gm	52 gm
2002 crop	55 gm	51 gm	53 gm
Enola	47 gm	58 gm	53 gm

Conclusion:

Most of the plant and seed characteristics between the Enola variety and Yellow River's 2001 crop and 2002 crop lots are close if not identical. Some of the slight characteristic differences and other issues need some discussion in this conclusion:

Average height at maturity:

Study 1 used seed from the 1996 breeder seed of Enola, and 2001 breeder seed of Enola. Breeder seed (genetically pure) does not have to meet the same certification seed quality standards as the Foundation, Registered and Certified seed classes meet. This seed may not have the same level of germination and/or vigor of the 2001 Certified lot of Enola planted in study 3. The results between Enola and the Yellow River 2001 crop and 2002 crop lots in study 3 are closer than the results in study 1.

Blossom color:

Blossom color was different than the PVP definition. There is a very light trace of pink in the blossoms. The color seems to deepen slightly as the day progresses. A quick look would cause the evaluator to say the blossom color is white. Even though this pink characteristic has not been identified in the PVP application, the Enola, and Yellow River 2001 crop and 2002 crop lots blossom color readings were very close.

Green leaflet color issue:

Lee Benson testified that he thought the color of the Enola field is different than the 2001 and 2002 Yellow River fields. As can be seen in chart 4 and chart 20, the leaf color readings for all three lots are very close. We found Benson's remark about the color to be compelling, so we took leaflet color readings in his field. The color distribution in his Enola and 2002 crop field is practically identical in chart 49. By the definition of the color of the green leaflets in the Enola PVP application, the color is the same.

Green pod constrictions:

Due to the rapid growth and development of bean pods in the green phase of the bean plant growth, the measure of constrictions is more meaningful in the mature stage. We did get similar distribution of green pod constrictions between the Enola, and Yellow River 2001 crop and 2002 crop lots.

Seeds per pod:

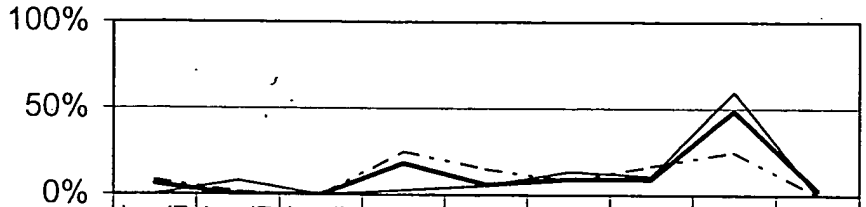
For some reason the seeds per pod for Enola is different than that of Yellow River's 2001 crop and 2002 crop lots. The Yellow river 2001 crop lot had the lowest count of seeds per pod in study one, and the highest number of seeds per pod in study three. Study one has the two breeder seed lots of Enola, one being the 1996 lot, and vigor seemed to be low in these two lots. Study three shows that there is little difference between Enola and Yellow River's 2001 crop and 2002 crop lots for seeds per pod.

It is my opinion after analyzing all of the data, that the Yellow River 2001 crop and the 2002 crop lots are not clearly distinguishable from that of the Enola variety.

Signature Gilbert P. Waibel Date 10/7/02

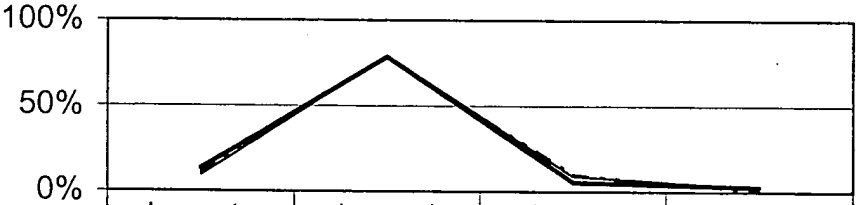
Gilbert P. Waibel

Chart 1 / Study 3 / Blossom Color



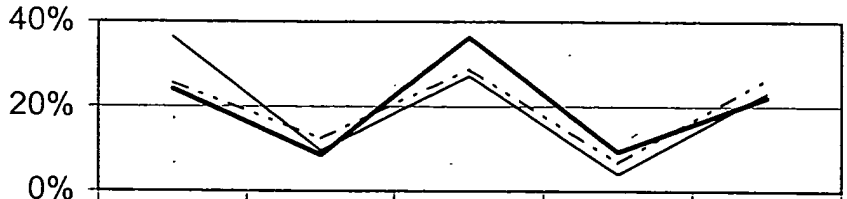
	bcol7	bcol7	bcol7	bcol8	bcol8	bcol8	bcol9	bcol9	bcolw
2001 Crop	0%	8%	0%	3%	5%	14%	11%	59%	0%
2002 Crop	8%	2%	0%	25%	15%	8%	17%	25%	0%
Enola	6%	0%	0%	18%	6%	9%	9%	48%	3%

Chart 2 / Study 3 / Leaflet Apex



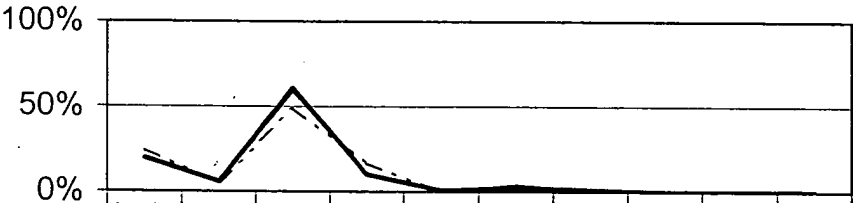
	laacuate	laacumi	lacusp	laobtu
2001 Crop	9%	79%	9%	2%
2002 Crop	11%	79%	10%	0%
Enola	13%	79%	5%	3%

Chart 3 / Study 3 / Leaflet Base



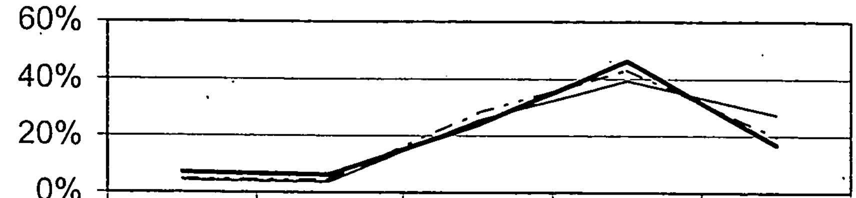
	lbatte	lbobliq	lbobtu	lbcord	lbcunea
2001 Crop	36%	10%	27%	4%	23%.
2002 Crop	26%	12%	29%	7%	27%
Enola	24%	8%	36%	9%	22%

Chart 4 / Study 3 / Leaflet Color



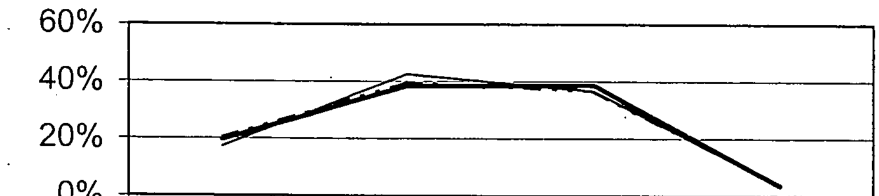
	lcol4	lcol5	lcol5	lcol5	lcol6	lcol6	lcol6	lcol7	lcol7	lcol7
2001 Crop	21%	5%	59%	11%	0%	4%	1%	0%	0%	0%
2002 Crop	24%	5%	49%	16%	0%	3%	2%	0%	0%	1%
Enola	19%	6%	61%	10%	1%	2%	1%	0%	0%	0%

Chart 5 / Study 3 / Leaflet Shape



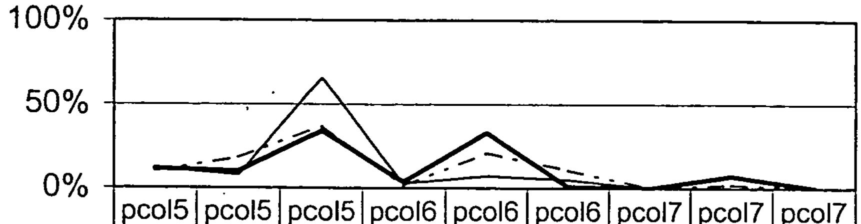
	lscord	lsdelt	lslance	lsovate	lsrhomb
2001 Crop	4%	4%	25%	39%	27%
2002 Crop	5%	5%	28%	43%	20%
Enola	7%	6%	24%	46%	17%

Chart 6 / Study 3 / Pod Beak Orientation



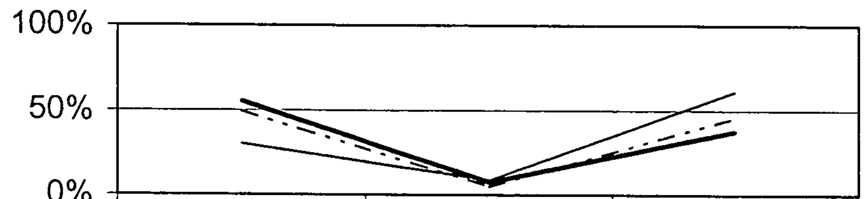
	pbocdown	pbocup	pbostr	pbovar
2001 Crop	17%	42%	37%	4%
2002 Crop	20%	40%	36%	4%
Enola	20%	38%	39%	4%

Chart 7 / Study 3 / Pod Color



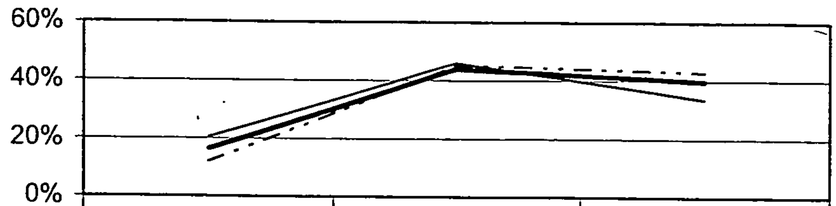
	pcol5	pcol5	pcol5	pcol6	pcol6	pcol6	pcol7	pcol7	pcol7
2001 Crop	12%	8%	66%	3%	7%	5%	0%	0%	0%
2002 Crop	10%	18%	37%	1%	21%	11%	0%	2%	0%
Enola	11%	10%	34%	4%	33%	1%	0%	7%	0%

Chart 8 / Study 3 / Pod Constrictions



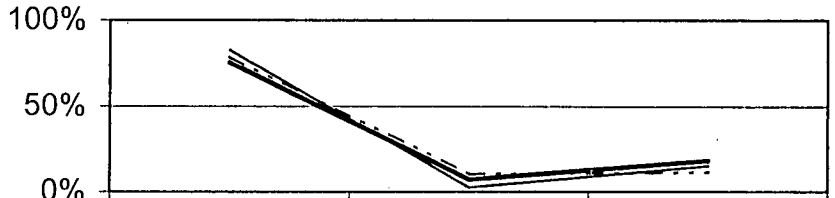
	pcondee	pconnon	pconslig
2001 Crop	30%	9%	61%
2002 Crop	49%	5%	46%
Enola	55%	7%	37%

Chart 9 / Study 3 / Pod Curvature



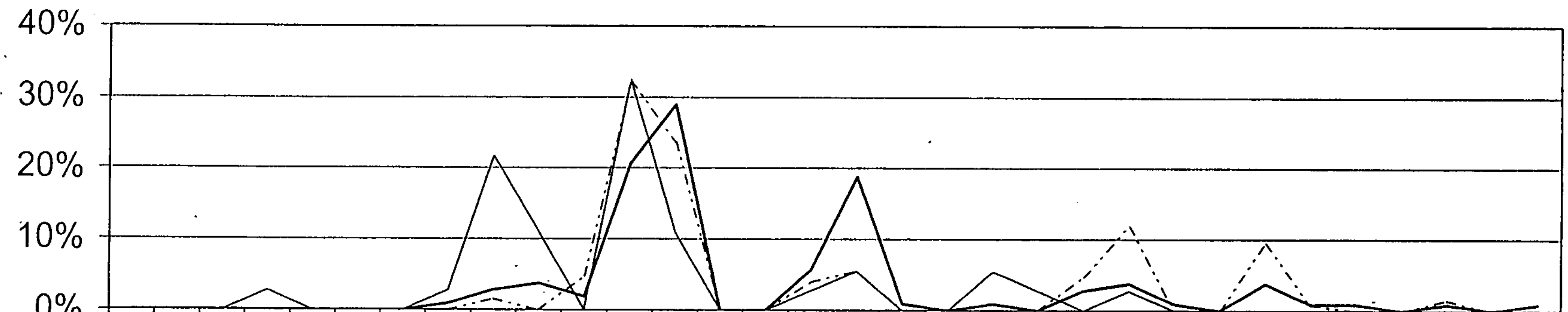
	pcucurv	pcuslight	pcustr
2001 Crop	20%	46%	34%
2002 Crop	12%	45%	43%
Enola	16%	44%	40%

Chart 10 / Study 3 / Pod Mature Beak Orientation



	pmbocdown	pmbocup	pmbostr
2001 Crop	83%	3%	15%
2002 Crop	79%	10%	11%
Enola	75%	7%	18%

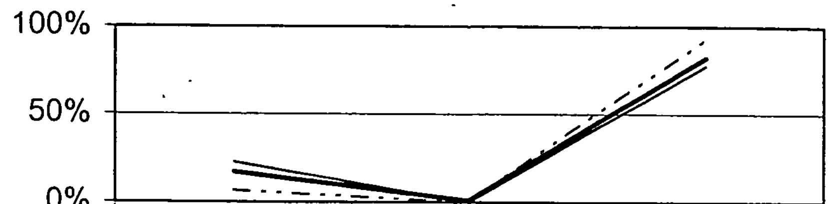
Chart 11 / Study 3 / Pod Mature Color



	pmcol1 0yr8/4	pmcol1 0yr8/6	pmcol1 0yr/9/2	pmcol1 0yr9/4	pmcol1 0yr8/4	pmcol1 0yr7/8	pmcol7 .5/8.5/4	pmcol7 .5/8.5/6	pmcol7 .5/9/4	pmcol7 .5/9/6	pmcol5 /9/2	pmcol5 /9/4	pmcol5 /9/6	pmcol5 /9/8	pmcol5 /8.5/2	pmcol5 /8.5/4
2001 Crop	0%	0%	0%	3%	0%	0%	0%	3%	22%	11%	0%	32%	11%	0%	0%	3%
2002 Crop	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	5%	32%	24%	0%	0%	4%
Enola	0%	0%	0%	0%	0%	0%	0%	1%	3%	4%	2%	21%	29%	0%	0%	6%

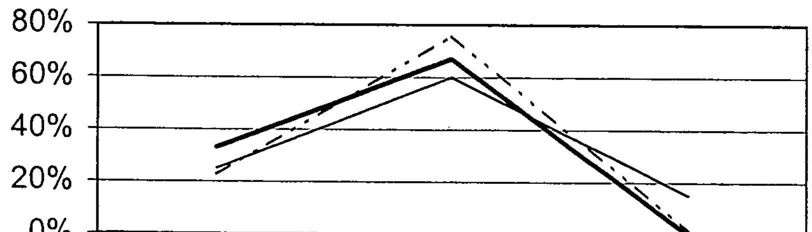
	pmcol5 /8.5/6	pmcol5 /8.5/8	pmcol5 /8/4	pmcol5 /8/6	pmcol5 /8/8	pmcol2 .5/9/2	pmcol2 .5/9/4	pmcol2 .5/9/6	pmcol2 .5/8.5/2	pmcol2 .5/8.5/4	pmcol2 .5/8.5/6	pmcol2 .5/8.5/8	pmcol2 .5/8/2	pmcol2 .5/8/4	pmcol2 .5/8/6	pmcol2 .5/8/8
2001 Crop	5%	0%	0%	5%	3%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2002 Crop	6%	0%	0%	0%	0%	5%	12%	0%	0%	9%	1%	0%	0%	2%	0%	0%
Enola	19%	1%	0%	1%	0%	3%	4%	1%	0%	4%	1%	1%	0%	1%	0%	1%

Chart 12 / Study 3 / Pod Mature Constrictions



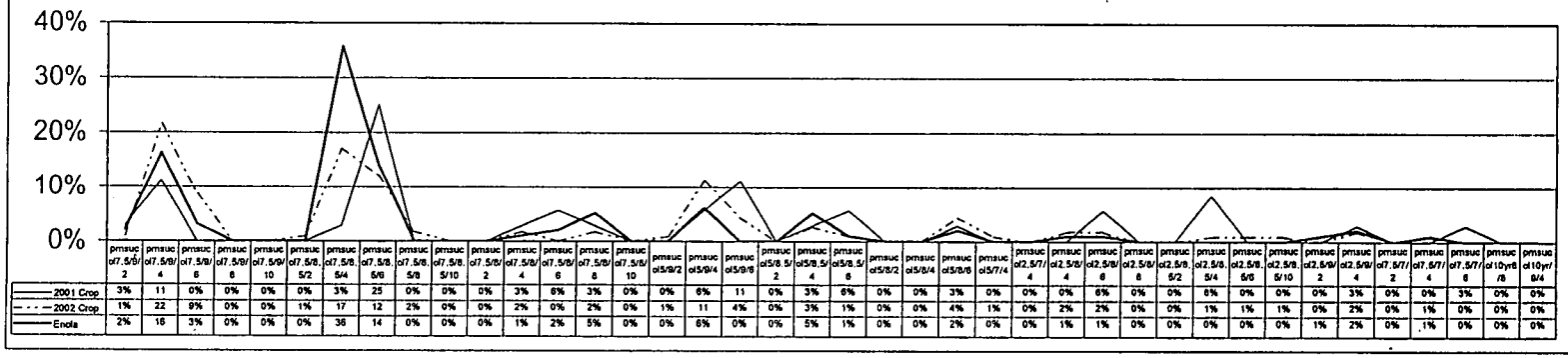
	pmcondee	pmconnon	pmconslig
2001 Crop	23%	0%	78%
2002 Crop	7%	0%	93%
Enola	17%	1%	82%

Chart 13 / Study 3 / Pod Mature Curvature



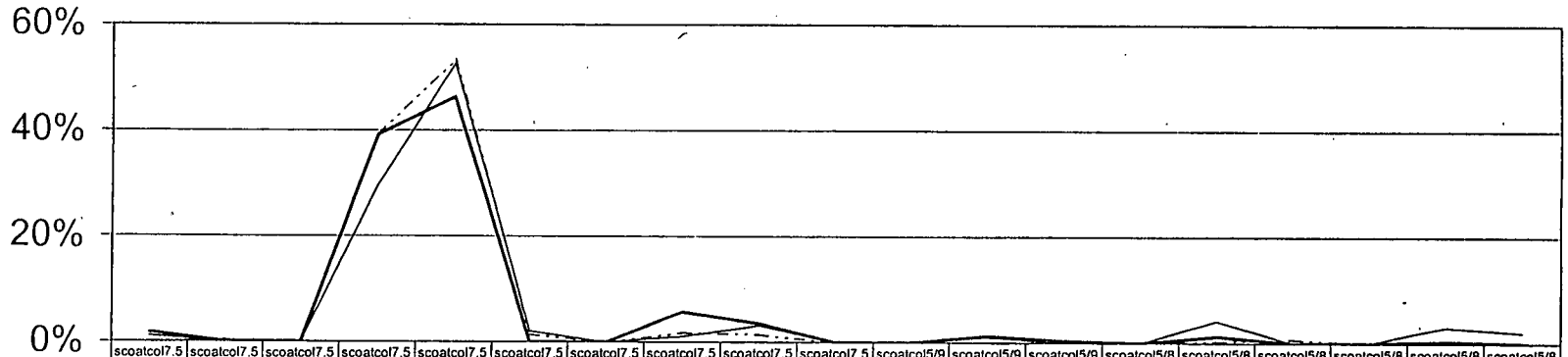
	pmcuslig	pmcucurv	pmcustr
2001 Crop	25%	60%	15%
2002 Crop	23%	76%	2%
Enola	33%	67%	0%

Chart 14 / Study 3 / Pod Mature Suture Color



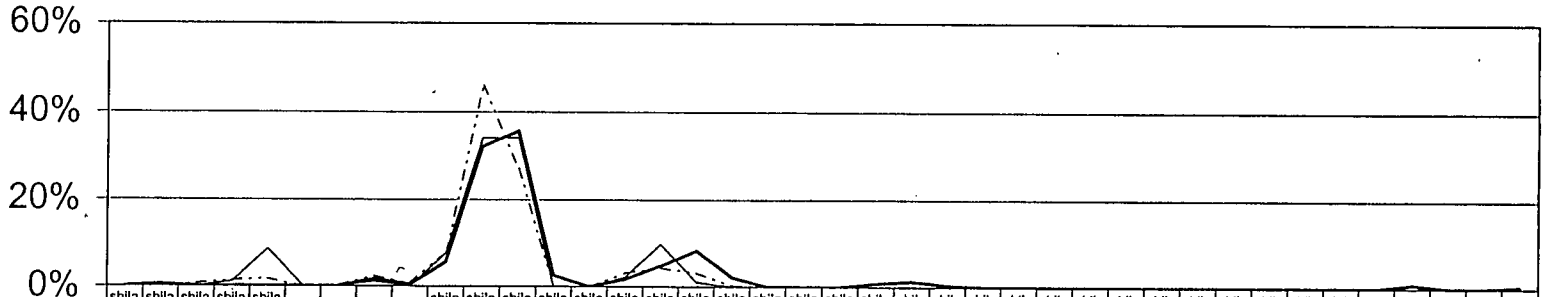
	pmsuc ol7.5/9/2	pmsuc ol7.5/9/4	pmsuc ol7.5/9/6	pmsuc ol7.5/9/8	pmsuc ol7.5/9/10	pmsuc ol7.5/8/2	pmsuc ol7.5/8/4	pmsuc ol7.5/8/6	pmsuc ol7.5/8/8	pmsuc ol7.5/8/10	pmsuc ol7.5/8.5/2	pmsuc ol7.5/8.5/4	pmsuc ol7.5/8.5/6	pmsuc ol7.5/8.5/8	pmsuc ol7.5/8.5/10	pmsuc ol5/9/2	pmsuc ol5/9/4	pmsuc ol5/9/6	pmsuc ol5/8.5/2	pmsuc ol5/8.5/4	pmsuc ol5/8.5/6	pmsuc ol5/8/2	pmsuc ol5/8/4	pmsuc ol5/8/6	pmsuc ol5/7/4	pmsuc ol2.5/7/4	pmsuc ol2.5/8/4	pmsuc ol2.5/8/6	pmsuc ol2.5/8/8	pmsuc ol2.5/8/5/2	pmsuc ol2.5/8/5/4	pmsuc ol2.5/8/5/6	pmsuc ol2.5/8/5/10	pmsuc ol2.5/9/2	pmsuc ol2.5/9/4	pmsuc ol7.5/7/2	pmsuc ol7.5/7/4	pmsuc ol7.5/7/6	pmsuc ol10yr8/8	pmsuc ol10yr7/4
2001 Crop	3%	11	0%	0%	0%	0%	3%	25	0%	0%	0%	3%	6%	3%	0%	0%	6%	11	0%	3%	6%	0%	0%	3%	0%	0%	0%	6%	0%	0%	6%	0%	0%	0%	3%	0%	0%	3%	0%	0%
2002 Crop	1%	22	9%	0%	0%	1%	17	12	2%	0%	0%	2%	0%	2%	0%	1%	11	4%	0%	3%	1%	0%	0%	4%	1%	0%	2%	2%	0%	0%	1%	1%	1%	0%	2%	0%	1%	0%	0%	0%
Enola	2%	16	3%	0%	0%	0%	36	14	0%	0%	0%	1%	2%	5%	0%	0%	6%	0%	0%	5%	1%	0%	0%	2%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	2%	0%	1%	0%	0%	0%

Chart 15 / Study 3 / Seed Coat Color



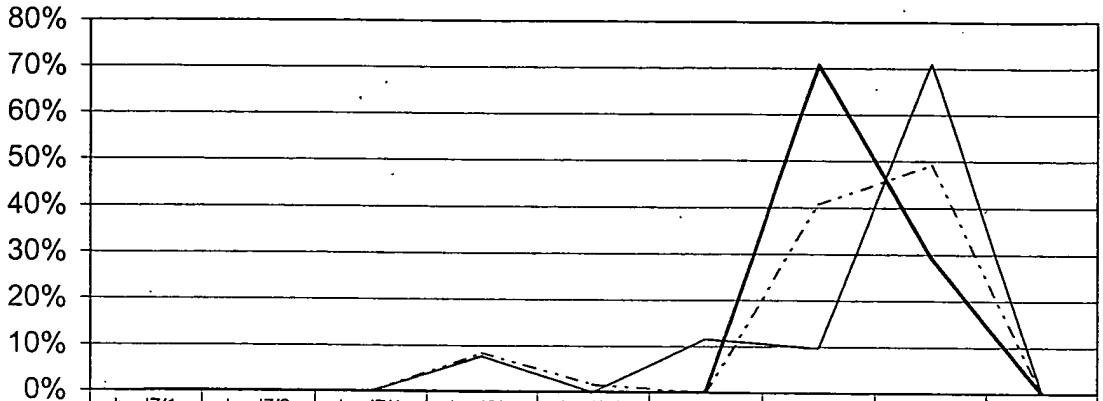
	scoatcol7.5 /9/4	scoatcol7.5 /9/6	scoatcol7.5 /9/8	scoatcol7.5 /8.5/4	scoatcol7.5 /8.5/6	scoatcol7.5 /8.5/8	scoatcol7.5 /8.5/10	scoatcol7.5 /8/4	scoatcol7.5 /8/6	scoatcol7.5 /8/8	scoatcol5/9 /2	scoatcol5/9 /4	scoatcol5/9 /6	scoatcol5/8 .5/2	scoatcol5/8 .5/4	scoatcol5/8 .5/6	scoatcol5/8 /2	scoatcol5/8 /4	scoatcol5/8 /8
2001 Crop	1%	0%	0%	29%	53%	2%	0%	1%	3%	0%	0%	1%	0%	0%	4%	0%	0%	3%	2%
2002 Crop	0%	0%	0%	39%	53%	1%	0%	2%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Enola	2%	0%	0%	39%	46%	0%	0%	6%	4%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%

Chart 16 / Study 3 / Seed Hilar Ring Color



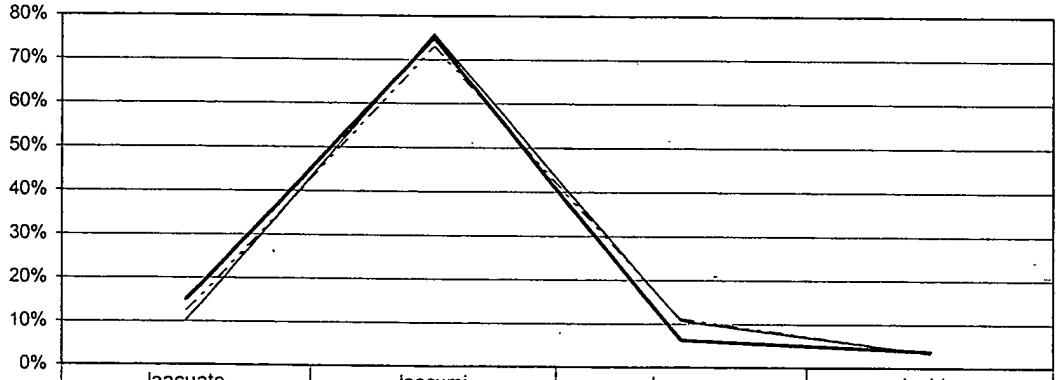
	shila rcol7 .5/8. 5/4	shila rcol7 .5/8. 5/6	shila rcol7 .5/9/ 2	shila rcol7 .5/9/ 4	shila rcol7 .5/9/ 6	shila rcol5 /7/4	shila rcol5 /9/2	shila rcol5 /9/4	shila rcol5 /9/6	shila rcol2 .5/9/ 2	shila rcol2 .5/9/ 4	shila rcol2 .5/9/ 6	shila rcol2 .5/9/ 8	shila rcol2 .5/8. 5/2	shila rcol2 .5/8. 5/4	shila rcol2 .5/8. 5/6	shila rcol2 .5/8. 5/8	shila rcol2 .5/8. 5/10	shila rcol2 .5/8/ 2	shila rcol2 .5/8/ 4	shila rcol2 .5/8/ 6	shila rcol2 .5/8/ 8	shila rcol2 .5/8/ 10	shila rcol2 .5/8/ 12	shila rcol2 .5/8. 5/10	shila rcol2 .5/7/ 6	shila rcol2 .5/7/ 8	shila rcol1 0yr9/ 2	shila rcol1 0yr9/ 4	shila rcol1 0/9/ 6	shila rcol1 0yr9/ 8	shila rcol1 0yr/8 .5/6	shila r10y r/8.5 /4	shila rcol1 0yr8/ 8	shila rcol1 0yr7/ 6	shila rcol1 0yr7/ 8	shila rcol1 0yr7/ 12	shila rcol1 0yr6/ 10	shila rcol1 0yr6/ 8	shila rcol1 0yr5/ 8
2001 Crop	0%	0%	0%	1%	9%	0%	0%	1%	0%	8%	34	34	0%	0%	2%	10	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2002 Crop	0%	0%	1%	1%	2%	0%	0%	3%	1%	8%	46	27	0%	0%	3%	4%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Enola	0%	0%	0%	0%	0%	0%	0%	2%	0%	6%	32	36	3%	0%	2%	5%	8%	2%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%

Chart 17 / Study 1 / Blossom Color



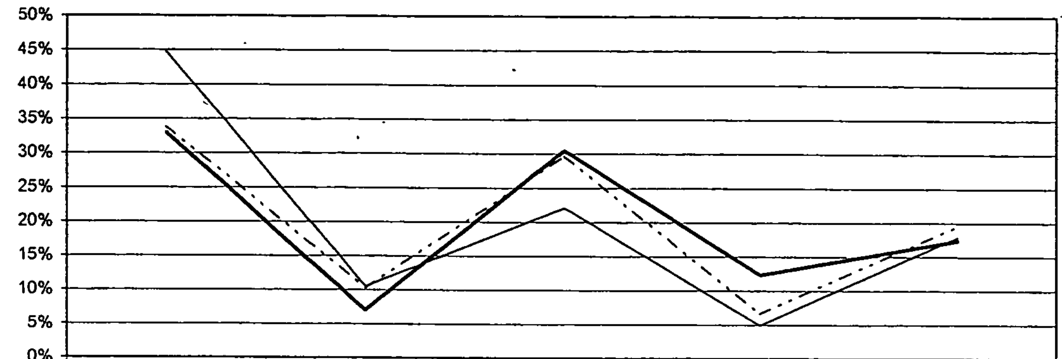
	bcol7/1	bcol7/2	bcol7/4	bcol8/1	bcol8/2	bcol8/4	bcol9/1	bcol9/2	bcolwhit
2001 Crop	0%	0%	0%	8%	0%	12%	10%	71%	0%
2002 Crop	0%	0%	0%	8%	2%	0%	41%	49%	0%
Enola	0%	0%	0%	0%	0%	0%	71%	29%	0%

Chart 18 / Study 1 / Leaflet Apex



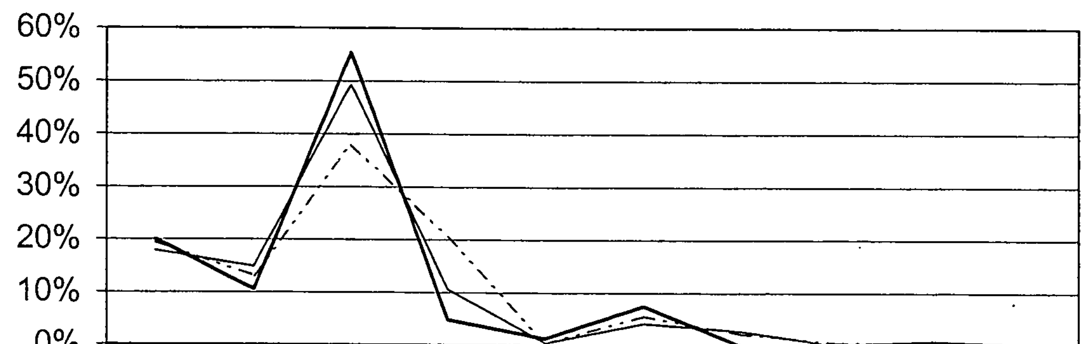
	laacuate	laacumi	lacusp	laobtu
2001 Crop	10%	76%	11%	3%
2002 Crop	13%	73%	11%	3%
Enola	15%	75%	6%	4%

Chart 19 / Study 1 / Leaflet Base



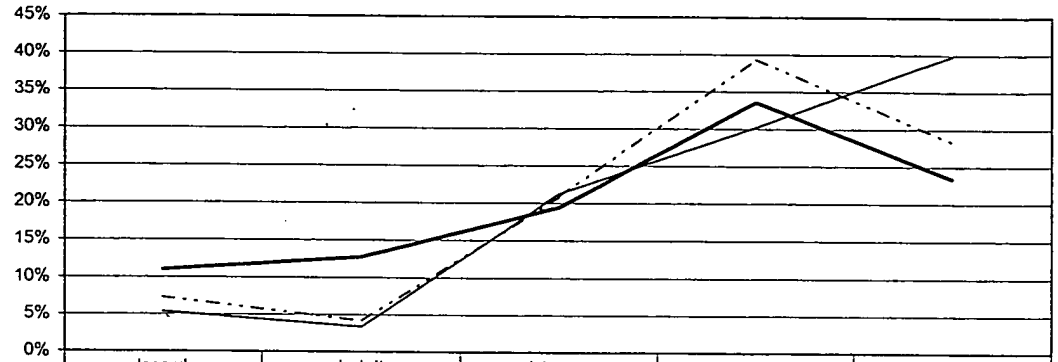
	lbatte	lbobliq	lbobtu	lbcord	lbcunea
2001 Crop	45%	10%	22%	5%	18%
2002 Crop	34%	10%	30%	7%	20%
Enola	33%	7%	30%	12%	17%

Chart 20 / Study 1 / Leaflet Color



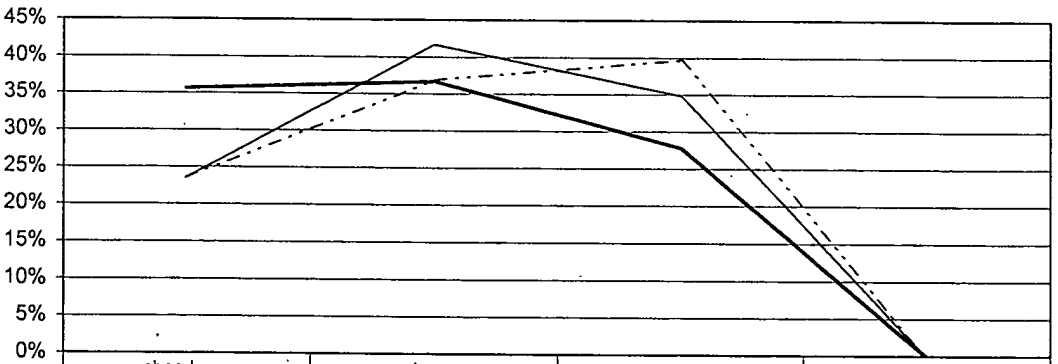
	lcol4/4	lcol5/4	lcol5/6	lcol5/8	lcol6/4	lcol6/6	lcol6/8	lcol7/4	lcol7/6	lcol7/8
2001 Crop	18%	15%	49%	11%	0%	4%	3%	0%	0%	0%
2002 Crop	19%	13%	38%	20%	0%	6%	2%	0%	0%	0%
Enola	20%	11%	55%	5%	1%	7%	0%	0%	1%	0%

Chart 21 / Study 1 / Leaflet Shape



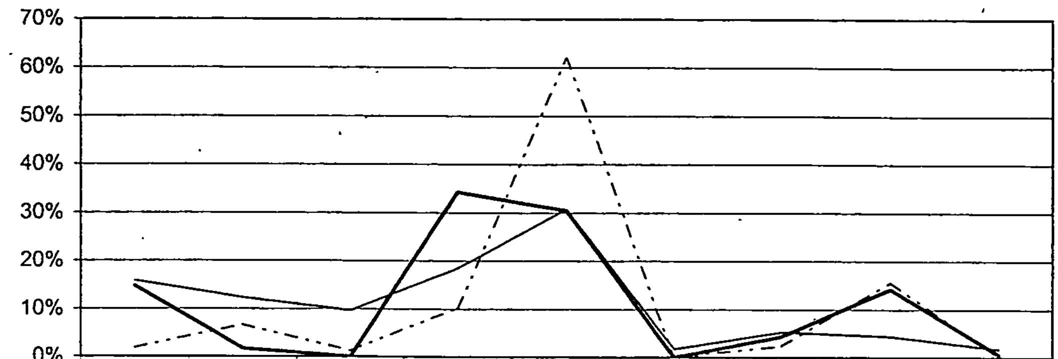
	lscord	lsdelt	lslance	lsovate	lsrhomb
2001 Crop	5%	3%	21%	30%	40%
2002 Crop	7%	4%	21%	39%	28%
Enola	11%	13%	19%	34%	23%

Chart 22 / Study 1 / Pod Beak Orientation



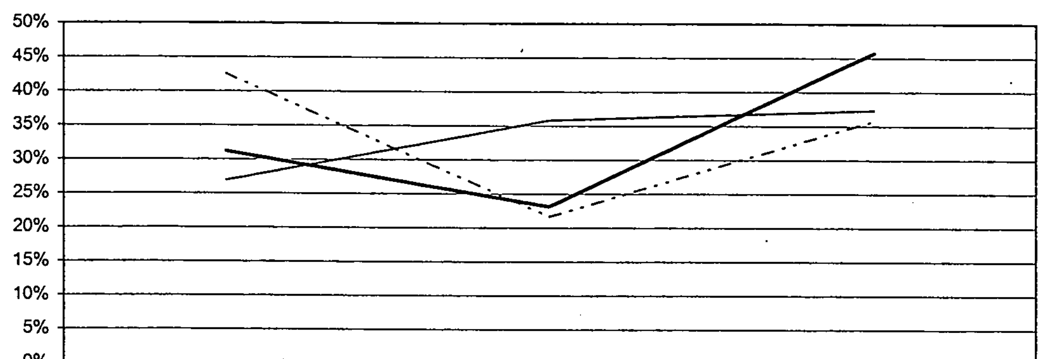
	pbocdown	pbocup	pbostr	pbovar
2001 Crop	23%	42%	35%	0%
2002 Crop	23%	37%	40%	0%
Enola	36%	37%	28%	0%

Chart 23 / Study 1 / Pod Color

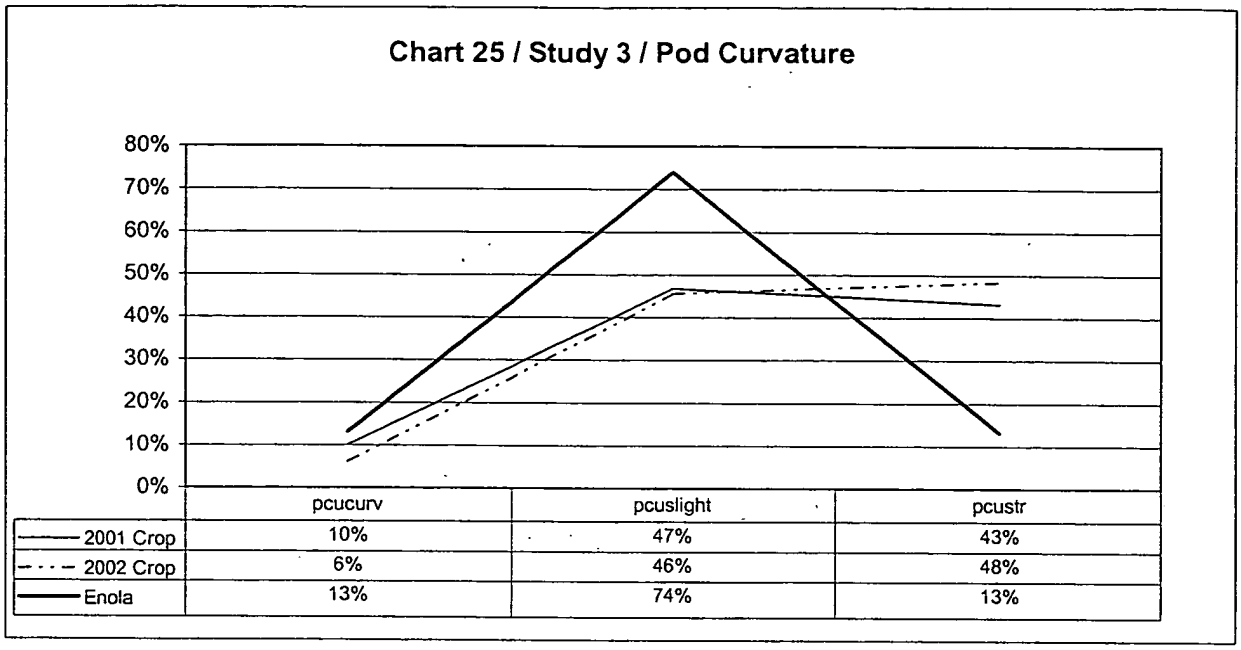


	pcol5/4	pcol5/6	pcol5/8	pcol6/4	pcol6/6	pcol6/8	pcol7/4	pcol7/6	pcol7/8
2001 Crop	16%	12%	10%	18%	31%	2%	5%	4%	2%
2002 Crop	2%	7%	1%	10%	62%	0%	2%	16%	0%
Enola	15%	2%	0%	34%	30%	0%	4%	14%	1%

Chart 24 / Study 1 / Pod Constrictions

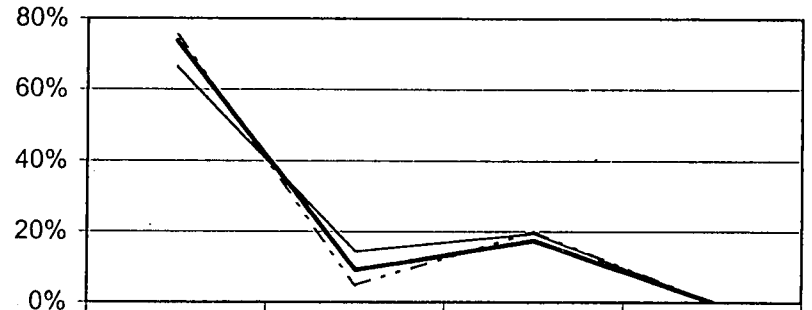


	pcondee	pconnon	pconslig
2001 Crop	27%	36%	37%
2002 Crop	43%	22%	36%
Enola	31%	23%	46%



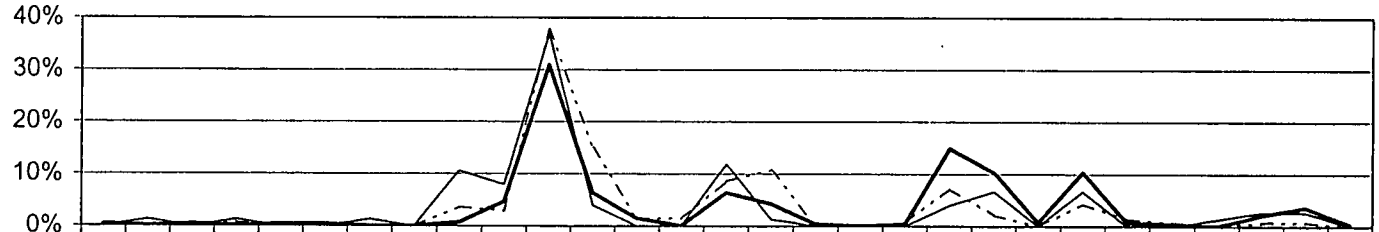
	pcucurv	pcuslight	pcustr
2001 Crop	10%	47%	43%
2002 Crop	6%	46%	48%
Enola	13%	74%	13%

Chart 26 / Study 1 / Pod Mature Beak Orientation



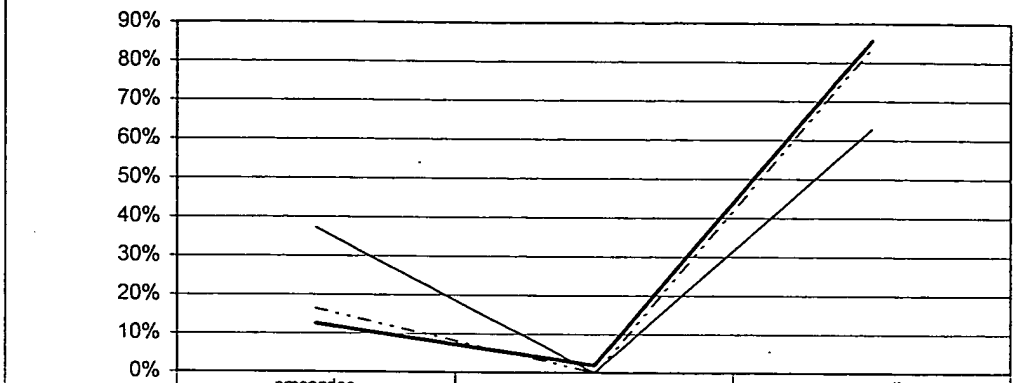
	pmbocdown	pmbocup	pmbostr	pmbovar
2001 Crop	66%	14%	19%	0%
2002 Crop	75%	5%	20%	0%
Enola	74%	9%	17%	0%

Chart 27 / Study 1 / Pod Mature Color



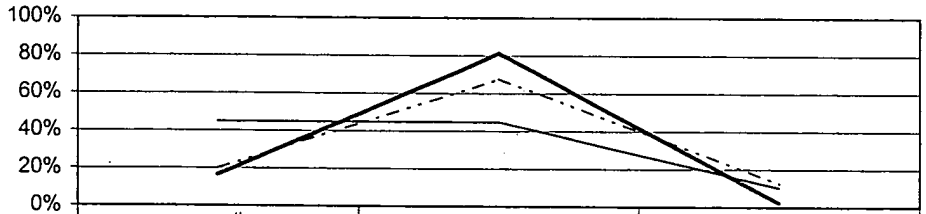
	pmc ol10 yr8/4	pmc ol10 yr8/6	pmc ol10 yr/9/2	pmc ol10 yr9/4	pmc ol10 yr8/4	pmc ol10 yr7/8	pmc ol7.5 /8.5/4	pmc ol7.5 /8.5/6	pmc ol7.5 /9/4	pmc ol5/9 /2	pmc ol5/9 /4	pmc ol5/9 /6	pmc ol5/9 /8	pmc ol5/8 .5/2	pmc ol5/8 .5/4	pmc ol5/8 .5/6	pmc ol5/8 .5/8	pmc ol5/8 /4	pmc ol5/8 /6	pmc ol2.5 /9/2	pmc ol2.5 /9/4	pmc ol2.5 /8.5/2	pmc ol2.5 /8.5/4	pmc ol2.5 /8.5/6	pmc ol2.5 /8.5/8	pmc ol2.5 /8/2	pmc ol2.5 /8/4	pmc ol2.5 /8/6	pmc ol2.5 /8/8
2001 Crop	0%	1%	0%	1%	0%	0%	1%	0%	11	8%	37	4%	0%	0%	12	1%	0%	0%	0%	4%	7%	0%	7%	0%	0%	1%	3%	3%	0%
2002 Crop	0%	0%	0%	1%	0%	0%	0%	0%	4%	3%	38	15	1%	1%	9%	11	0%	0%	1%	7%	2%	0%	4%	1%	1%	0%	1%	1%	0%
Enola	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	31	6%	1%	0%	6%	4%	0%	0%	0%	15	10	1%	10	1%	0%	0%	2%	4%	0%

Chart 28 / Study 1 / Pod Mature Constrictions



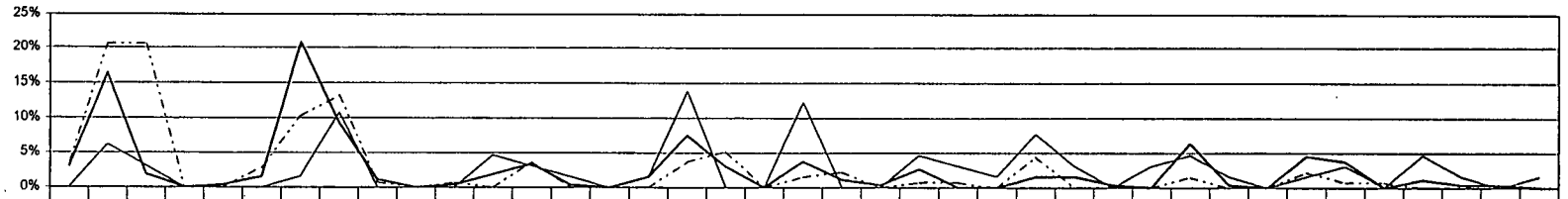
	pmcondee	pmconnon	pmconslig
2001 Crop	37%	0%	63%
2002 Crop	16%	0%	84%
Enola	13%	2%	86%

Chart 29 / Study 1 / Pod Mature Curvature



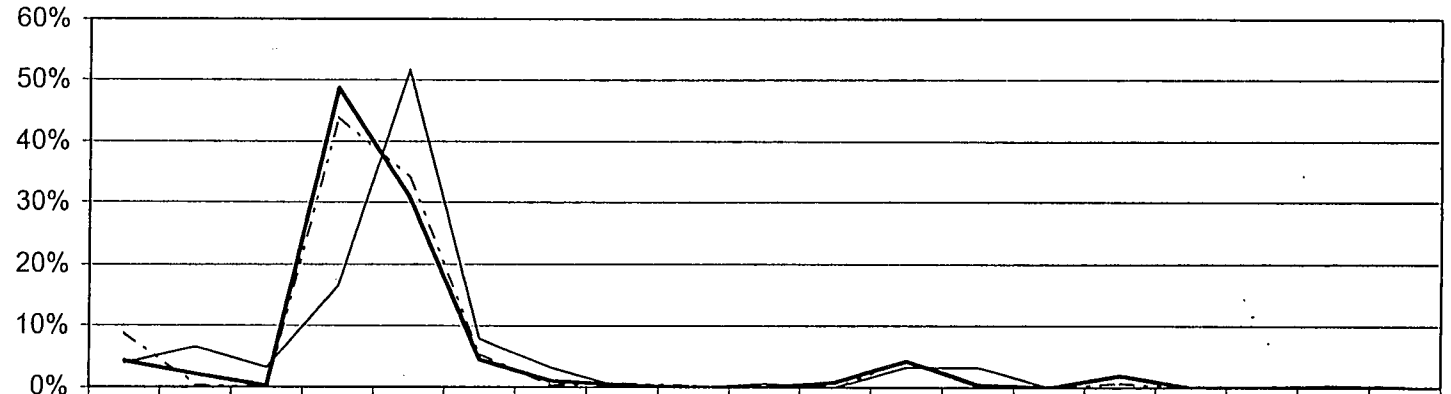
	pmcuslig	pmcucurv	pmcustr
Series1	45%	45%	10%
Series2	20%	68%	12%
Series3	16%	81%	2%

Chart 30 / Study 1 / Pod Mature Suture Color

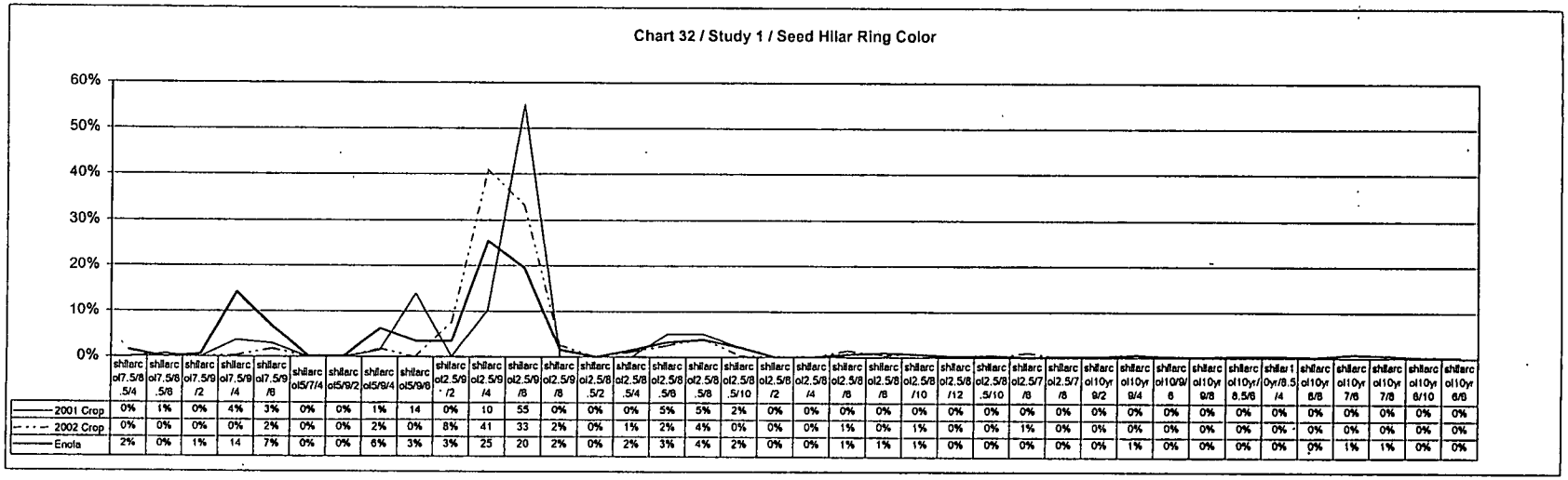


	pmsuc ol7.5/9 /2	pmsuc ol7.5/9 /4	pmsuc ol7.5/9 /6	pmsuc ol7.5/9 /8	pmsuc ol7.5/9 /10	pmsuc ol7.5/8 .5/2	pmsuc ol7.5/8 .5/4	pmsuc ol7.5/8 .5/6	pmsuc ol7.5/8 .5/8	pmsuc ol7.5/8 .5/10	pmsuc ol7.5/8 /2	pmsuc ol7.5/8 /4	pmsuc ol7.5/8 /6	pmsuc ol7.5/8 /8	pmsuc ol7.5/8 /10	pmsuc ol5/8/2	pmsuc ol5/8/4	pmsuc ol5/9/6	pmsuc ol5/8.5 /2	pmsuc ol5/8.5 /4	pmsuc ol5/8.5 /6	pmsuc ol5/8/2	pmsuc ol5/8/4	pmsuc ol5/8/6	pmsuc ol2.5/7 /4	pmsuc ol2.5/8 /4	pmsuc ol2.5/8 /6	pmsuc ol2.5/8 /8	pmsuc ol2.5/8 .5/2	pmsuc ol2.5/8 .5/4	pmsuc ol2.5/8 .5/6	pmsuc ol2.5/8 .5/10	pmsuc ol2.5/9 /2	pmsuc ol2.5/9 /4	pmsuc ol7.5/7 /2	pmsuc ol7.5/7 /4	pmsuc ol7.5/7 /6	pmsuc ol10yr 8/8	pmsuc ol10yr/ 9/4
2001 Crop	0	6	3	0	0	0	2	11	0	0	0	5	3	2	0	2	14	0	0	12	0	0	5	3	2	8	3	0	3	5	2	0	2	3	0	5	2	0	2
2002 Crop	4	21	21	0	0	3	10	13	1	0	1	0	4	0	0	0	4	5	0	1	2	0	1	1	0	4	0	0	0	1	0	0	2	1	1	0	0	0	0
Enola	3	16	2	0	0	1	21	9	1	0	0	2	3	0	0	1	7	3	0	4	1	0	3	0	0	1	1	0	0	6	0	0	4	4	0	1	0	0	0

Chart 31 / Study 1 / Seed Coat Color

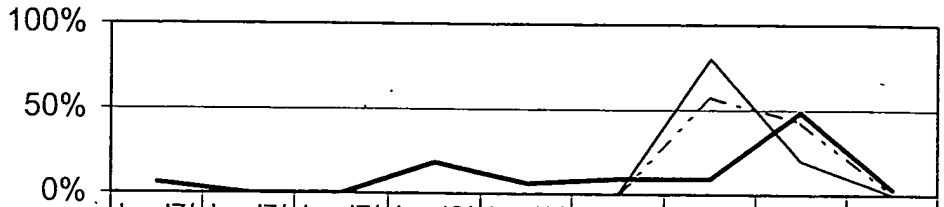


	scoatcol7.5/9/4	scoatcol7.5/9/6	scoatcol7.5/9/8	scoatcol7.5/8.5/4	scoatcol7.5/8.5/6	scoatcol7.5/8.5/8	scoatcol7.5/8/4	scoatcol7.5/8/6	scoatcol7.5/8/8	scoatcol7.5/8.5/10	scoatcol5/9/2	scoatcol5/9/4	scoatcol5/9/6	scoatcol5/8.5/2	scoatcol5/8.5/4	scoatcol5/8.5/6	scoatcol5/8/2	scoatcol5/8/4	scoatcol5/8/6
2001 Crop	4%	7%	3%	16%	52%	8%	3%	0%	0%	1%	0%	3%	3%	0%	0%	0%	0%	0%	0%
2002 Crop	9%	0%	0%	44%	34%	5%	0%	1%	0%	0%	0%	4%	0%	0%	1%	0%	0%	0%	0%
Enola	4%	2%	0%	49%	31%	5%	1%	0%	0%	0%	1%	4%	0%	0%	2%	0%	0%	0%	0%



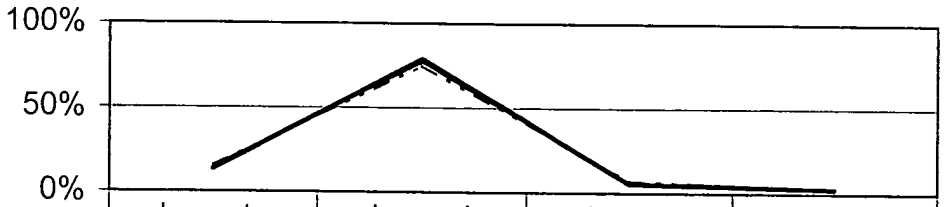
	shilarc ol7.5/8 .5/4	shilarc ol7.5/8 .5/8	shilarc ol7.5/9 /2	shilarc ol7.5/9 /4	shilarc ol7.5/9 /8	shilarc ol5/7/4	shilarc ol5/9/2	shilarc ol5/9/4	shilarc ol5/9/8	shilarc ol2.5/9 /2	shilarc ol2.5/9 /4	shilarc ol2.5/9 /8	shilarc ol2.5/9 /8	shilarc ol2.5/8 .5/2	shilarc ol2.5/8 .5/4	shilarc ol2.5/8 .5/6	shilarc ol2.5/8 .5/8	shilarc ol2.5/8 .5/10	shilarc ol2.5/8 /2	shilarc ol2.5/8 /4	shilarc ol2.5/8 /6	shilarc ol2.5/8 /8	shilarc ol2.5/8 /10	shilarc ol2.5/8 /12	shilarc ol2.5/8 .5/10	shilarc ol2.5/8 /8	shilarc ol2.5/7 /8	shilarc ol10yr 9/2	shilarc ol10yr 9/4	shilarc ol10/9/ 6	shilarc ol10yr 9/8	shilarc ol10yr/ 8.5/8	shilar1 0yr/8.5 /4	shilarc ol10yr 8/8	shilarc ol10yr 7/6	shilarc ol10yr 7/8	shilarc ol10yr 6/10	shilarc ol10yr 6/8
2001 Crop	0%	1%	0%	4%	3%	0%	0%	1%	14	0%	10	55	0%	0%	0%	5%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2002 Crop	0%	0%	0%	0%	2%	0%	0%	2%	0%	8%	41	33	2%	0%	1%	2%	4%	0%	0%	0%	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Enola	2%	0%	1%	14	7%	0%	0%	6%	3%	3%	25	20	2%	0%	2%	3%	4%	2%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	1%	0%	0%

Chart 33 / 3 Enolas / Blossom Color



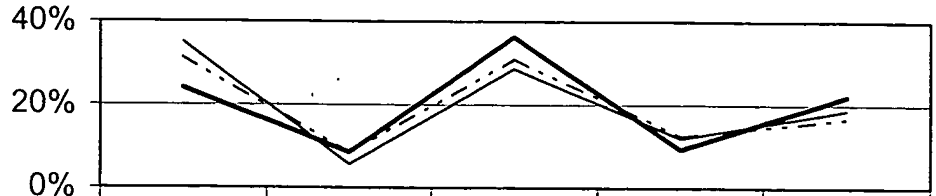
	bcol7/	bcol7/	bcol7/	bcol8/	bcol8/	bcol8/	bcol9/	bcol9/	bcolw
102	0%	0%	0%	0%	0%	0%	80%	20%	0%
187	0%	0%	0%	0%	0%	0%	57%	43%	0%
101	6%	0%	0%	18%	6%	9%	9%	48%	3%

Chart 34 / 3 Enolas / Leaflet Apex



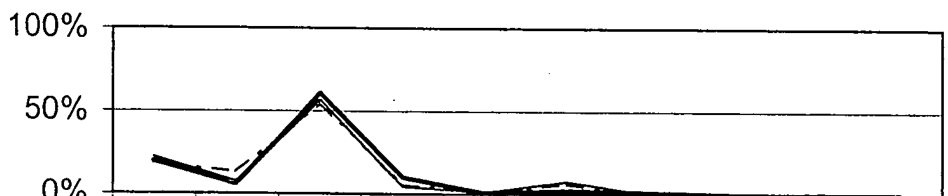
	laacuate	laacumi	lacusp	laobtu
102	15%	77%	6%	3%
187	15%	75%	7%	3%
101	13%	79%	5%	3%

Chart 35 / 3 Enolas / Leaflet Base



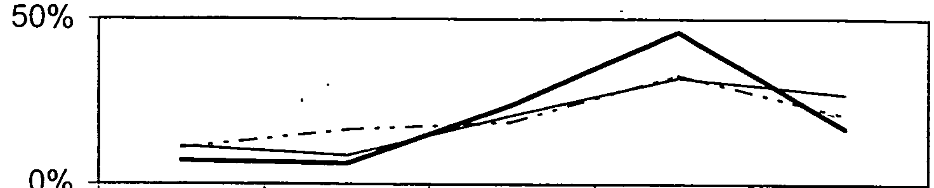
	lbatte	lbobliq	lbobtu	lbcord	lbcunea
102	35%	6%	29%	12%	19%
187	31%	8%	31%	12%	17%
101	24%	8%	36%	9%	22%

Chart 36 / 3 Enolas / Leaflet Color



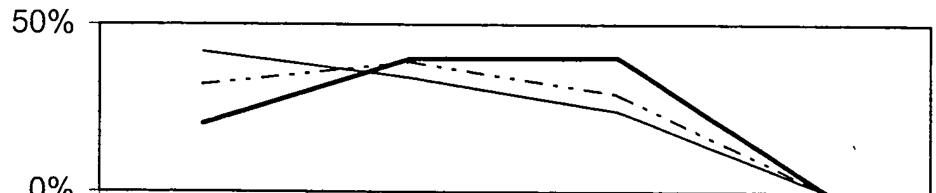
	lcol4/	lcol5/	lcol5/	lcol5/	lcol6/	lcol6/	lcol6/	lcol7/	lcol7/	lcol7/
102	22%	7%	57%	4%	1%	8%	0%	0%	0%	0%
187	19%	13%	55%	5%	1%	6%	0%	0%	1%	0%
101	19%	6%	61%	10%	1%	2%	1%	0%	0%	0%

Chart 37 / 3 Enolas / Leaflet Shape



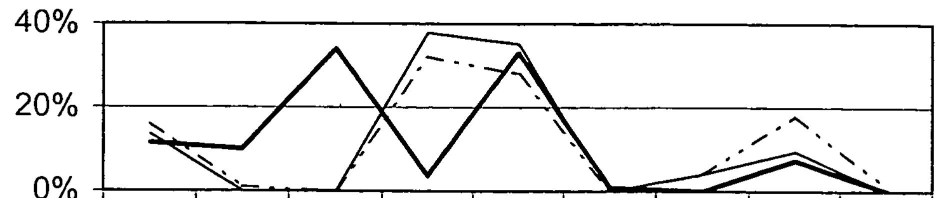
	lscord	lsdelt	lslance	lsovate	lsrhomb
—— 102	11%	9%	21%	32%	27%
-·-·- 187	11%	16%	19%	33%	21%
━━ 101	7%	6%	24%	46%	17%

Chart 38 / 3 Enolas / Pod Beak Orientation



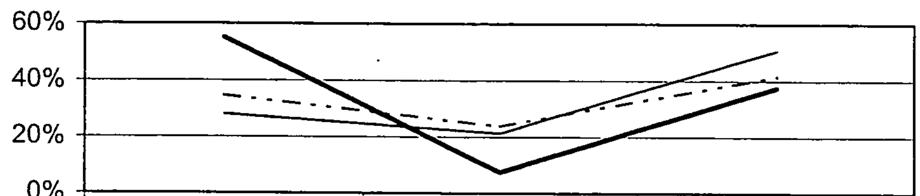
	pbocdown	pbocup	pbostr	pbovar
—— 102	42%	34%	24%	0%
-·-·- 187	32%	39%	29%	0%
━━ 101	20%	40%	40%	0%

Chart 39 / 3 Enolas / Pod Color



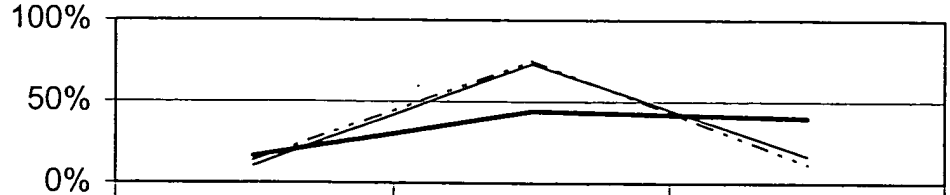
	pcol5/	pcol5/	pcol5/	pcol6/	pcol6/	pcol6/	pcol7/	pcol7/	pcol7/
102	14%	0%	0%	38%	35%	0%	4%	9%	0%
187	16%	1%	0%	32%	28%	0%	4%	18%	1%
101	11%	10%	34%	4%	33%	1%	0%	7%	0%

Chart 40 / 3 Enolas / Pod Constrictions

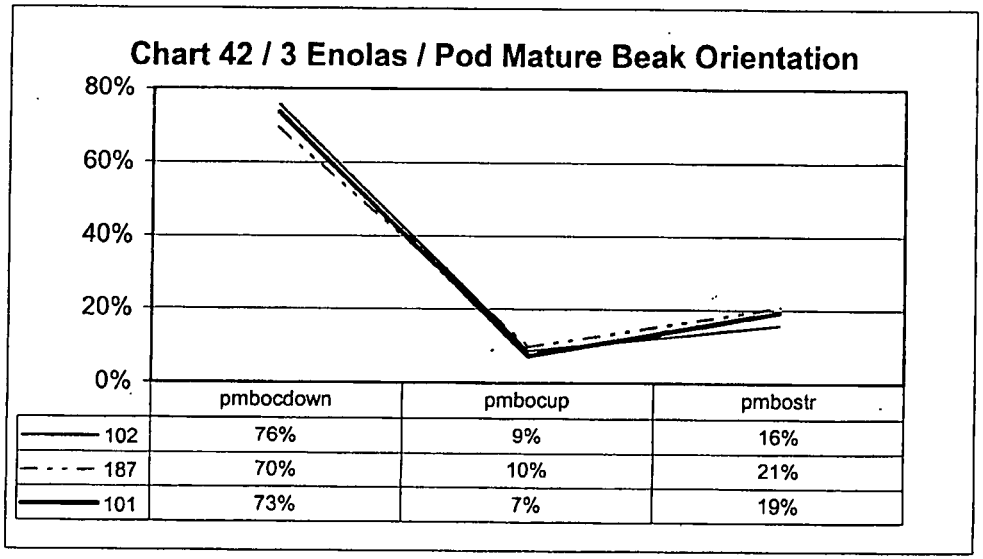


	pcondee	pconnon	pconslig
102	28%	21%	51%
187	35%	24%	42%
101	55%	7%	37%

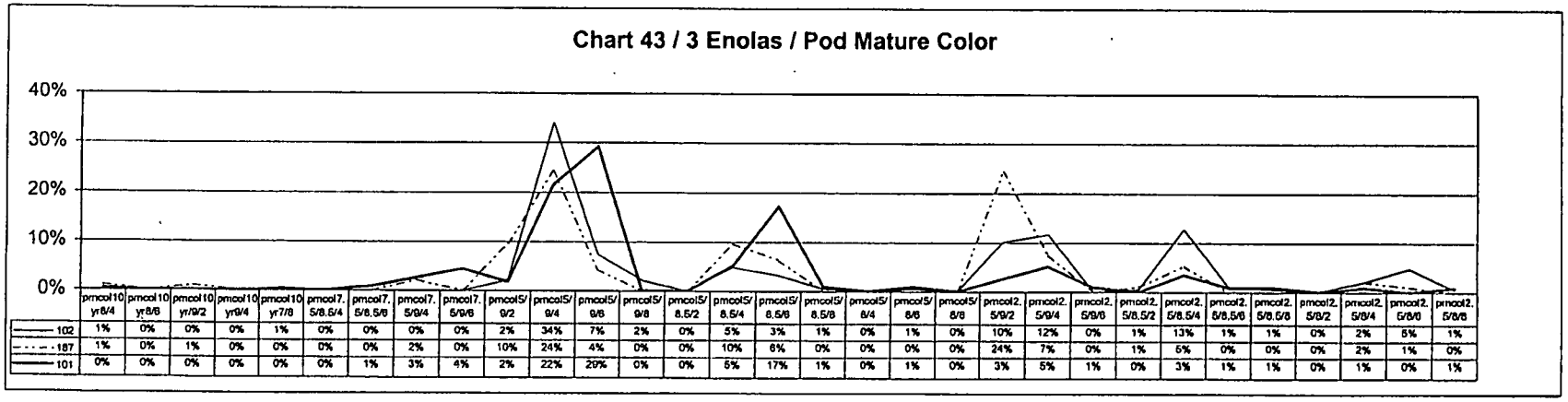
Chart 41 / 3 Enolas / Pod Curvature



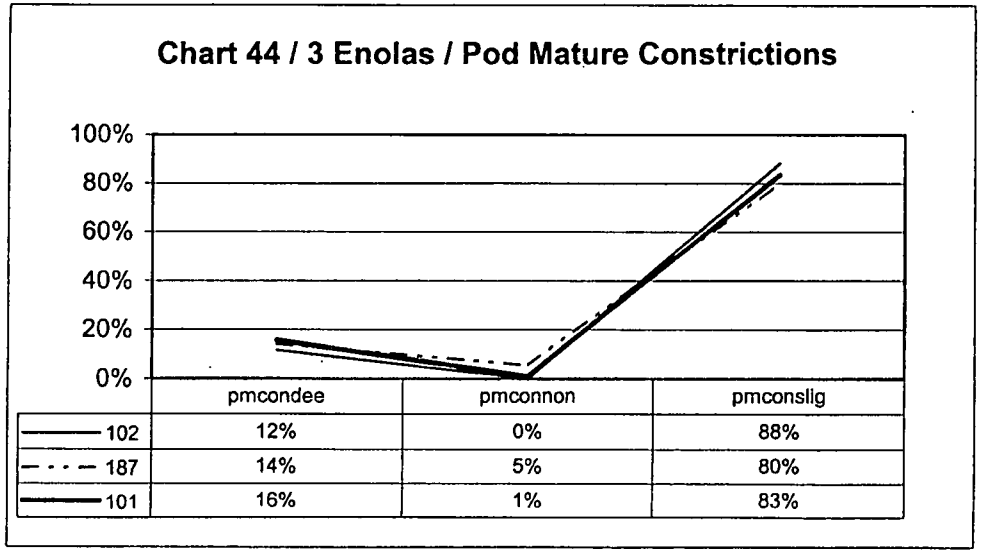
	pcucurv	pcuslight	pcustr
102	10%	73%	17%
187	13%	75%	12%
101	16%	44%	40%



	pmbocdown	pmbocup	pmbostr
102	76%	9%	16%
187	70%	10%	21%
101	73%	7%	19%



	pmcol10 yr8/4	pmcol10 yr8/6	pmcol10 yr/9/2	pmcol10 yr9/4	pmcol10 yr7/8	pmcol7. 5/8.5/4	pmcol7. 5/8.5/6	pmcol7. 5/9/4	pmcol7. 5/9/6	pmcol5/ 9/2	pmcol5/ 9/4	pmcol5/ 9/6	pmcol5/ 9/8	pmcol5/ 8.5/2	pmcol5/ 8.5/4	pmcol5/ 8.5/6	pmcol5/ 8.5/8	pmcol5/ 8/4	pmcol5/ 8/6	pmcol5/ 8/8	pmcol2. 5/9/2	pmcol2. 5/9/4	pmcol2. 5/9/6	pmcol2. 5/8.5/2	pmcol2. 5/8.5/4	pmcol2. 5/8.5/6	pmcol2. 5/8.5/8	pmcol2. 5/8/2	pmcol2. 5/8/4	pmcol2. 5/8/6	pmcol2. 5/8/8
102	1%	0%	0%	0%	1%	0%	0%	0%	0%	2%	34%	7%	2%	0%	5%	3%	1%	0%	1%	0%	10%	12%	0%	1%	13%	1%	1%	0%	2%	5%	1%
187	1%	0%	1%	0%	0%	0%	0%	2%	0%	10%	24%	4%	0%	0%	10%	6%	0%	0%	0%	0%	24%	7%	0%	1%	5%	0%	0%	0%	2%	1%	0%
101	0%	0%	0%	0%	0%	0%	1%	3%	4%	2%	22%	29%	0%	0%	5%	17%	1%	0%	1%	0%	3%	5%	1%	0%	3%	1%	1%	0%	1%	0%	1%



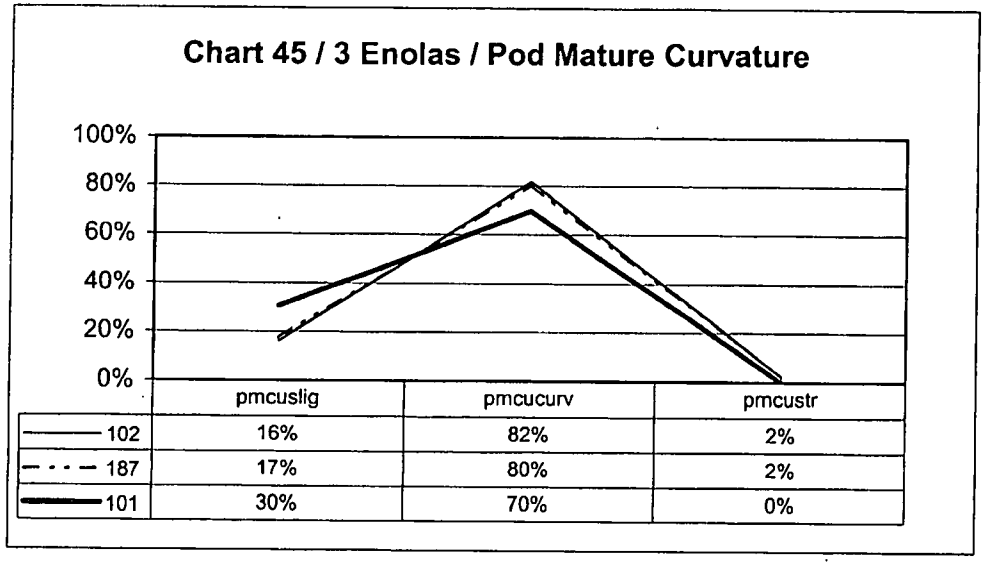
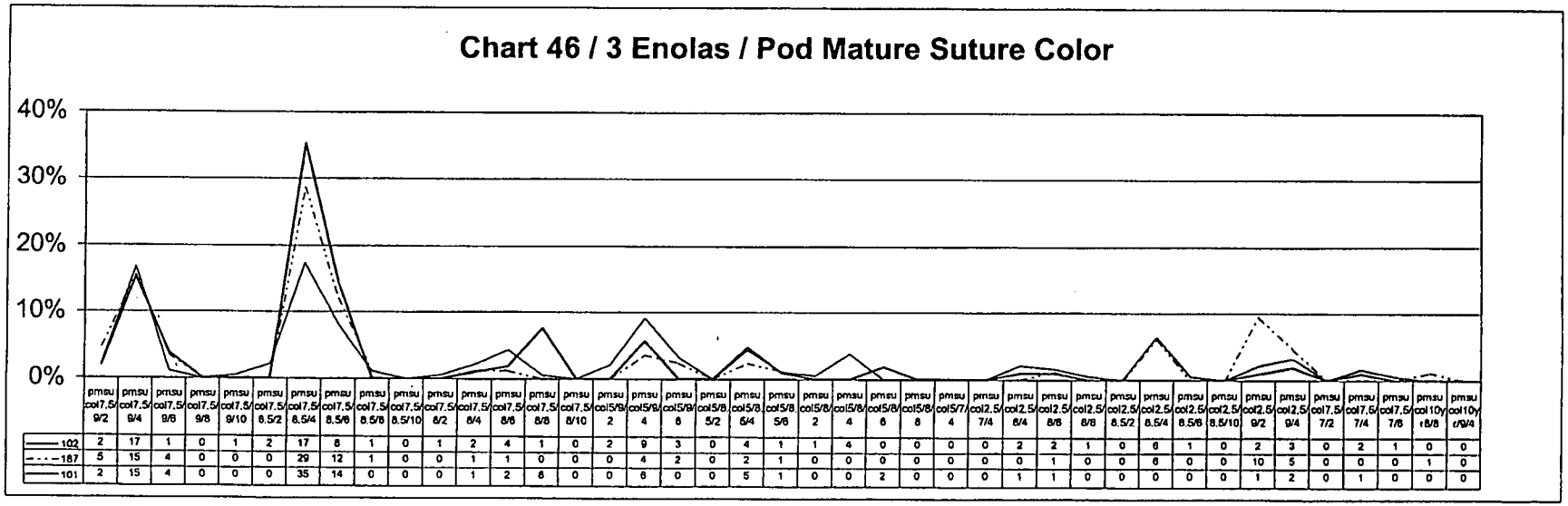
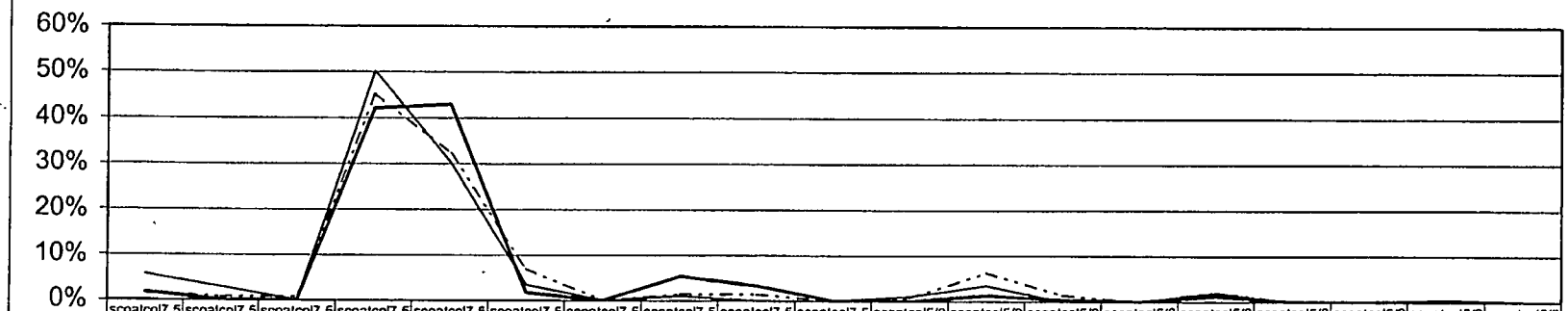


Chart 46 / 3 Enolas / Pod Mature Suture Color

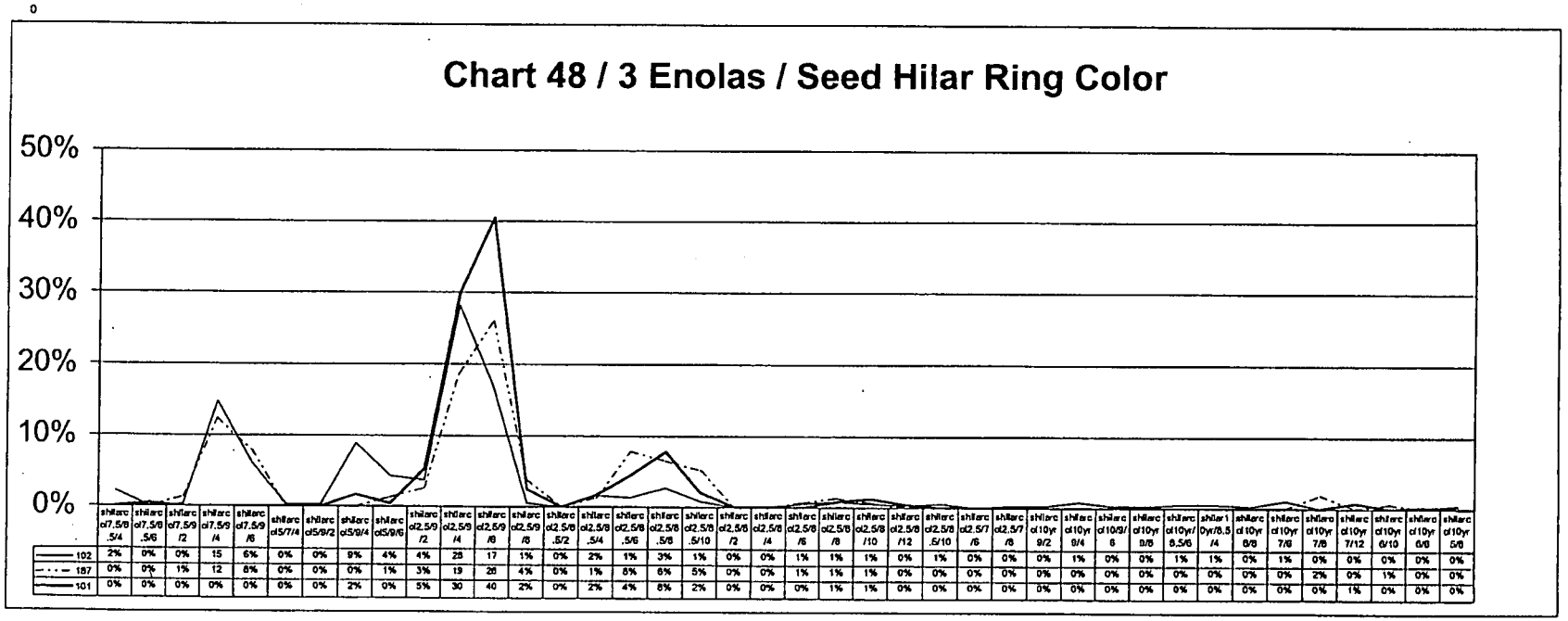


	pmsu col7.5/ 9/2	pmsu col7.5/ 9/4	pmsu col7.5/ 9/6	pmsu col7.5/ 9/8	pmsu col7.5/ 9/10	pmsu col7.5/ 8.5/2	pmsu col7.5/ 8.5/4	pmsu col7.5/ 8.5/6	pmsu col7.5/ 8.5/8	pmsu col7.5/ 8.5/10	pmsu col7.5/ 8/2	pmsu col7.5/ 8/4	pmsu col7.5/ 8/6	pmsu col7.5/ 8/8	pmsu col7.5/ 8/10	pmsu col5/8/ 2	pmsu col5/8/ 4	pmsu col5/8/ 6	pmsu col5/8/ 5/2	pmsu col5/8/ 5/4	pmsu col5/8/ 5/6	pmsu col5/8/ 2	pmsu col5/8/ 4	pmsu col5/8/ 6	pmsu col5/8/ 8	pmsu col5/7/ 4	pmsu col2.5/ 7/4	pmsu col2.5/ 8/4	pmsu col2.5/ 8/6	pmsu col2.5/ 8/8	pmsu col2.5/ 8.5/2	pmsu col2.5/ 8.5/4	pmsu col2.5/ 8.5/6	pmsu col2.5/ 8.5/10	pmsu col2.5/ 9/2	pmsu col2.5/ 9/4	pmsu col7.5/ 7/2	pmsu col7.5/ 7/4	pmsu col7.5/ 7/6	pmsu col10y r8/8	pmsu col10y r9/4
102	2	17	1	0	1	2	17	8	1	0	1	2	4	1	0	2	9	3	0	4	1	1	4	0	0	0	0	2	2	1	0	6	1	0	2	3	0	2	1	0	0
187	5	15	4	0	0	0	29	12	1	0	0	1	1	0	0	0	4	2	0	2	1	0	0	0	0	0	0	0	1	0	0	6	0	0	10	5	0	0	0	1	0
101	2	15	4	0	0	0	35	14	0	0	0	1	2	6	0	0	6	0	0	5	1	0	0	2	0	0	0	1	1	0	0	0	0	0	1	2	0	1	0	0	0

Chart 47 / 3 Enolas / Seed Coat Color



	scoatcol7.5/9/4	scoatcol7.5/9/6	scoatcol7.5/9/8	scoatcol7.5/8.5/4	scoatcol7.5/8.5/6	scoatcol7.5/8.5/8	scoatcol7.5/8.5/10	scoatcol7.5/8/4	scoatcol7.5/8/6	scoatcol7.5/8/8	scoatcol5/9/2	scoatcol5/9/4	scoatcol5/9/6	scoatcol5/8/.5/2	scoatcol5/8/.5/4	scoatcol5/8/.5/6	scoatcol5/8/2	scoatcol5/8/4	scoatcol5/8/6
102	6%	3%	0%	50%	30%	3%	0%	1%	0%	0%	1%	3%	0%	0%	2%	0%	0%	0%	0%
187	1%	1%	1%	45%	32%	7%	0%	1%	1%	0%	1%	6%	1%	0%	2%	0%	0%	0%	0%
101	2%	0%	0%	42%	43%	2%	0%	5%	3%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%



	shilarc of7.5/8 .5/4	shilarc of7.5/8 .5/6	shilarc of7.5/9 /2	shilarc of7.5/9 /4	shilarc of7.5/9 /6	shilarc of5/7/4	shilarc of5/9/2	shilarc of5/9/4	shilarc of5/9/6	shilarc of2.5/9 /2	shilarc of2.5/9 /4	shilarc of2.5/9 /6	shilarc of2.5/9 /8	shilarc of2.5/8 .5/2	shilarc of2.5/8 .5/4	shilarc of2.5/8 .5/6	shilarc of2.5/8 .5/8	shilarc of2.5/8 .5/10	shilarc of2.5/8 /2	shilarc of2.5/8 /4	shilarc of2.5/8 /6	shilarc of2.5/8 /8	shilarc of2.5/8 /10	shilarc of2.5/8 /12	shilarc of2.5/8 .5/10	shilarc of2.5/7 /6	shilarc of2.5/7 /8	shilarc of10yr 9/2	shilarc of10yr 8/4	shilarc of10/8/ 6	shilarc of10yr 8/6	shilarc of10yr/ 8.5/6	shilarc 10yr/8.5 /4	shilarc of10yr 8/8	shilarc of10yr 7/8	shilarc of10yr 7/6	shilarc of10yr 7/12	shilarc of10yr 6/10	shilarc of10yr 6/8	shilarc of10yr 5/8
102	2%	0%	0%	15	6%	0%	0%	9%	4%	4%	28	17	1%	0%	2%	1%	3%	1%	0%	0%	1%	1%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	1%	0%	0%	0%	0%
187	0%	0%	1%	12	8%	0%	0%	0%	1%	3%	19	26	4%	0%	1%	8%	6%	5%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%
101	0%	0%	0%	0%	0%	0%	0%	2%	0%	5%	30	40	2%	0%	2%	4%	8%	2%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%